

<213> Homo sapiens

<400> 1649

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Met Ala Arg Val Leu Lys Ala Ala Ala Asn Ala Val Gly Leu Phe
 1          5          10          15
Ser Arg Leu Gln Ala Pro Ile Pro Thr Val Arg Ala Ser Ser Thr Ser
          20          25          30
Gln Pro Leu Asp Gln Val Thr Gly Ser Val Trp Asn Leu Gly Arg Leu
          35          40          45
Asn His Val Ala Ile Ala Val Pro Asp Leu Glu Lys Ala Ala Ala Phe
          50          55          60
Tyr Lys Asn Ile Leu Gly Ala Gln Val Ser Glu Ala Val Pro Leu Pro
          65          70          75          80
Glu His Gly Val Ser Val Val Phe Val Asn Leu Gly Asn Thr Lys Met
          85          90          95
Glu Leu Leu His Pro Leu Gly Arg Asp Ser Pro Ile Ala Gly Phe Leu
          100          105          110
Gln Lys Asn Lys Ala Gly Gly Met His His Ile Cys Ile Glu Val Asp
          115          120          125
Asn Ile Asn Ala Ala Val Met Asp Leu Lys Lys Lys Lys Ile Arg Ser
          130          135          140
Leu Ser Glu Glu Val Lys Ile Gly Ala His Gly Lys Pro Val Ile Phe
          145          150          155          160
Leu His Pro Lys Asp Cys Gly Gly Val Leu Val Glu Leu Glu Gln Ala
          165          170          175 176

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<210> 1650

<211> 2189

<212> PRT

<213> Homo sapiens

<400> 1650

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Met Ala Asp Val Thr Ala Arg Ser Leu Gln Tyr Glu Tyr Lys Ala Asn
 1          5          10          15
Ser Asn Leu Val Leu Gln Ala Asp Arg Ser Leu Ile Asp Arg Thr Arg
          20          25          30
Arg Asp Glu Pro Thr Gly Glu Val Leu Ser Leu Val Gly Lys Leu Glu
          35          40          45
Gly Thr Arg Met Gly Asp Lys Ala Gln Arg Thr Lys Pro Gln Met Gln
          50          55          60
Glu Glu Arg Arg Ala Lys Arg Arg Lys Arg Asp Glu Asp Arg His Asp
          65          70          75          80
Ile Asn Lys Met Lys Gly Tyr Thr Leu Leu Ser Glu Gly Ile Asp Glu
          85          90          95
Met Val Gly Ile Ile Tyr Lys Pro Lys Thr Lys Glu Thr Arg Glu Thr
          100          105          110
Tyr Glu Val Leu Leu Ser Phe Ile Gln Ala Ala Leu Gly Asp Gln Pro
          115          120          125
Arg Asp Ile Leu Cys Gly Ala Ala Asp Glu Val Leu Ala Val Leu Lys
          130          135          140
Asn Glu Lys Leu Arg Asp Lys Glu Arg Arg Lys Glu Ile Asp Leu Leu
          145          150          155          160
Leu Gly Gln Thr Asp Asp Thr Arg Tyr His Val Leu Val Asn Leu Gly
          165          170          175
Lys Lys Ile Thr Asp Tyr Gly Gly Asp Lys Glu Ile Gln Asn Met Asp
          180          185          190
Asp Asn Ile Asp Glu Thr Tyr Gly Val Asn Val Gln Phe Glu Ser Asp
          195          200          205

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Glu Glu Glu Gly Asp Glu Asp Val Tyr Gly Glu Val Arg Glu Glu Ala
210 215 220
Ser Asp Asp Asp Met Glu Gly Asp Glu Ala Val Val Arg Cys Thr Leu
225 230 235 240
Ser Ala Asn Met Tyr Val Asp Glu Ile Leu Val Trp Cys Ala Ser Glu
245 250 255
Leu Asn Ile Pro Glu Phe Phe Pro Leu Glu Ser Pro His Lys Lys Val
260 265 270
Gly Tyr Gly Leu Ser Ser Arg Thr Trp Leu Gln Gly Gly Gly Lys Val
275 280 285
Ile Glu Ala Gly Arg Asp Leu Leu Val Ala Ser Gly Glu Leu Met Ser
290 295 300
Ser Lys Lys Lys Asp Leu His Pro Arg Asp Ile Asp Ala Phe Trp Leu
305 310 315 320
Gln Arg Gln Leu Ser Arg Phe Tyr Asp Asp Ala Ile Val Ser Gln Lys
325 330 335
Lys Ala Asp Glu Val Leu Glu Ile Leu Lys Thr Ala Ser Asp Asp Arg
340 345 350
Glu Cys Glu Asn Gln Leu Val Leu Leu Leu Gly Phe Asn Thr Phe Asp
355 360 365
Phe Ile Lys Val Leu Arg Gln His Arg Met Met Ile Leu Tyr Cys Thr
370 375 380
Leu Leu Ala Ser Ala Gln Ser Glu Ala Glu Lys Glu Arg Ile Met Gly
385 390 395 400
Lys Met Glu Ala Asp Pro Glu Leu Ser Lys Phe Leu Tyr Gln Leu His
405 410 415
Glu Thr Glu Lys Glu Asp Leu Ile Arg Glu Glu Arg Ser Arg Arg Glu
420 425 430
Arg Val Arg Gln Ser Arg Met Asp Thr Asp Leu Glu Thr Met Asp Leu
435 440 445
Asp Gln Gly Gly Glu Ala Leu Ala Pro Arg Gln Val Leu Asp Leu Glu
450 455 460
Asp Leu Val Phe Thr Gln Gly Ser His Phe Met Ala Asn Lys Arg Cys
465 470 475 480
Gln Leu Pro Asp Gly Ser Phe Arg Arg Gln Arg Lys Gly Tyr Glu Glu
485 490 495
Val His Val Pro Ala Leu Lys Pro Lys Pro Phe Gly Ser Glu Glu Gln
500 505 510
Leu Leu Pro Val Glu Lys Leu Pro Lys Tyr Ala Gln Ala Gly Phe Glu
515 520 525
Gly Phe Lys Thr Leu Asn Arg Ile Gln Ser Lys Leu Tyr Arg Ala Ala
530 535 540
Leu Glu Thr Asp Glu Asn Leu Leu Leu Cys Ala Pro Thr Gly Ala Gly
545 550 555 560
Lys Thr Asn Val Ala Leu Met Cys Met Leu Arg Glu Ile Gly Lys His
565 570 575
Ile Asn Met Asp Gly Thr Ile Asn Val Asp Asp Phe Lys Ile Ile Tyr
580 585 590
Ile Ala Pro Met Arg Ser Leu Val Gln Glu Met Val Gly Ser Phe Gly
595 600 605
Lys Arg Leu Ala Thr Tyr Gly Ile Thr Val Ala Glu Leu Thr Gly Asp
610 615 620
His Gln Leu Cys Lys Glu Glu Ile Ser Ala Thr Gln Ile Ile Val Cys
625 630 635 640
Thr Pro Glu Lys Trp Asp Ile Ile Thr Arg Lys Gly Gly Glu Arg Thr
645 650 655
Tyr Thr Gln Leu Val Arg Leu Ile Ile Leu Asp Glu Ile His Leu Leu
660 665 670
His Asp Asp Arg Gly Pro Val Leu Glu Ala Leu Val Ala Arg Ala Ile
675 680 685
Arg Asn Ile Glu Met Thr Gln Glu Asp Val Arg Leu Ile Gly Leu Ser
690 695 700
Ala Thr Leu Pro Asn Tyr Glu Asp Val Ala Thr Phe Leu Arg Val Asp
705 710 715 720

Pro	Ala	Lys	Gly	Leu	Phe	Tyr	Phe	Asp	Asn	Ser	Phe	Arg	Pro	Val	Pro
				725					730					735	
Leu	Glu	Gln	Thr	Tyr	Val	Gly	Ile	Thr	Glu	Lys	Lys	Ala	Ile	Lys	Arg
			740					745					750		
Phe	Gln	Ile	Met	Asn	Glu	Ile	Val	Tyr	Glu	Lys	Ile	Met	Glu	His	Ala
		755					760					765			
Gly	Lys	Asn	Gln	Val	Leu	Val	Phe	Val	His	Ser	Arg	Lys	Glu	Thr	Gly
	770				775						780				
Lys	Thr	Ala	Arg	Ala	Ile	Arg	Asp	Met	Cys	Leu	Glu	Lys	Asp	Thr	Leu
785					790					795					800
Gly	Leu	Phe	Leu	Arg	Glu	Gly	Ser	Ala	Ser	Thr	Glu	Val	Leu	Arg	Thr
			805						810					815	
Glu	Ala	Glu	Gln	Cys	Lys	Asn	Leu	Glu	Leu	Lys	Asp	Leu	Leu	Pro	Tyr
			820					825					830		
Gly	Phe	Ala	Ile	His	His	Ala	Gly	Met	Thr	Arg	Val	Asp	Arg	Thr	Leu
	835						840					845			
Val	Glu	Asp	Leu	Phe	Gly	Asp	Lys	His	Ile	Gln	Val	Leu	Val	Ser	Thr
	850					855					860				
Ala	Thr	Leu	Ala	Trp	Gly	Val	Asn	Leu	Pro	Ala	His	Thr	Val	Ile	Ile
865					870					875					880
Lys	Gly	Thr	Gln	Val	Tyr	Ser	Pro	Glu	Lys	Gly	Arg	Trp	Thr	Glu	Leu
			885						890					895	
Gly	Ala	Leu	Asp	Ile	Leu	Gln	Met	Leu	Gly	Arg	Ala	Gly	Arg	Pro	Gln
		900						905					910		
Tyr	Asp	Thr	Lys	Gly	Glu	Gly	Ile	Leu	Ile	Thr	Ser	His	Gly	Glu	Leu
	915						920					925			
Gln	Tyr	Tyr	Leu	Ser	Leu	Leu	Asn	Gln	Gln	Leu	Pro	Ile	Glu	Ser	Gln
	930					935					940				
Met	Val	Ser	Lys	Leu	Pro	Asp	Met	Leu	Asn	Ala	Glu	Ile	Val	Leu	Gly
945					950					955					960
Asn	Val	Gln	Asn	Ala	Lys	Asp	Ala	Val	Asn	Trp	Leu	Gly	Tyr	Ala	Tyr
			965						970					975	
Leu	Tyr	Ile	Arg	Met	Leu	Arg	Ser	Pro	Thr	Leu	Tyr	Gly	Ile	Ser	His
		980						985					990		
Asp	Asp	Leu	Lys	Gly	Asp	Pro	Leu	Leu	Asp	Gln	Arg	Arg	Leu	Asp	Leu
	995					1000					1005				
Val	His	Thr	Ala	Ala	Leu	Met	Leu	Asp	Lys	Asn	Asn	Leu	Val	Lys	Tyr
	1010					1015					1020				
Asp	Lys	Lys	Thr	Gly	Asn	Phe	Gln	Val	Thr	Glu	Leu	Gly	Arg	Ile	Ala
1025					1030					1035					1040
Ser	His	Tyr	Tyr	Ile	Thr	Asn	Asp	Thr	Val	Gln	Thr	Tyr	Asn	Gln	Leu
			1045					1050					1055		
Leu	Lys	Pro	Thr	Leu	Ser	Glu	Ile	Glu	Leu	Phe	Arg	Val	Phe	Ser	Leu
		1060						1065					1070		
Ser	Ser	Glu	Phe	Lys	Asn	Ile	Thr	Val	Arg	Glu	Glu	Glu	Lys	Leu	Glu
	1075					1080					1085				
Leu	Gln	Lys	Leu	Leu	Glu	Arg	Val	Pro	Ile	Pro	Val	Lys	Glu	Ser	Ile
	1090				1095					1100					
Glu	Glu	Pro	Ser	Ala	Lys	Ile	Asn	Val	Leu	Leu	Gln	Ala	Phe	Ile	Ser
1105				1110					1115					1120	
Gln	Leu	Lys	Leu	Glu	Gly	Phe	Ala	Leu	Met	Ala	Asp	Met	Val	Tyr	Val
			1125					1130					1135		
Thr	Gln	Ser	Ala	Gly	Arg	Leu	Met	Arg	Ala	Ile	Phe	Glu	Ile	Val	Leu
	1140						1145					1150			
Asn	Arg	Gly	Trp	Ala	Gln	Leu	Thr	Asp	Lys	Thr	Leu	Asn	Leu	Cys	Lys
	1155					1160					1165				
Met	Ile	Asp	Lys	Arg	Met	Trp	Gln	Ser	Met	Cys	Pro	Leu	Arg	Gln	Phe
	1170				1175					1180					
Arg	Lys	Leu	Pro	Glu	Glu	Val	Val	Lys	Lys	Ile	Glu	Lys	Lys	Asn	Phe
1185			1190						1195					1200	
Pro	Phe	Glu	Arg	Leu	Tyr	Asp	Leu	Asn	His	Asn	Glu	Ile	Gly	Glu	Leu
			1205					1210					1215		
Ile	Arg	Met	Pro	Lys	Met	Gly	Lys	Thr	Ile	His	Lys	Tyr	Val	His	Leu
		1220						1225					1230		

Phe Pro Lys Leu Glu Leu Ser Val His Leu Gln Pro Ile Thr Arg Ser
 1235 1240 1245
 Thr Leu Lys Val Glu Leu Thr Ile Thr Pro Asp Phe Gln Trp Asp Glu
 1250 1255 1260
 Lys Val His Gly Ser Ser Glu Ala Phe Trp Ile Leu Val Glu Asp Val
 1265 1270 1275 1280
 Asp Ser Glu Val Ile Leu His His Glu Tyr Phe Leu Leu Lys Ala Lys
 1285 1290 1295
 Tyr Ala Gln Asp Glu His Leu Ile Thr Phe Phe Val Pro Val Phe Glu
 1300 1305 1310
 Pro Leu Pro Pro Gln Tyr Phe Ile Arg Val Val Ser Asp Arg Trp Leu
 1315 1320 1325
 Ser Cys Glu Thr Gln Leu Pro Val Ser Phe Arg His Leu Ile Leu Pro
 1330 1335 1340
 Glu Lys Tyr Pro Pro Pro Thr Glu Leu Leu Asp Leu Gln Pro Leu Pro
 1345 1350 1355 1360
 Val Ser Ala Leu Arg Asn Ser Ala Phe Glu Ser Leu Tyr Gln Asp Lys
 1365 1370 1375
 Phe Pro Phe Phe Asn Pro Ile Gln Thr Gln Val Phe Asn Thr Val Tyr
 1380 1385 1390
 Asn Ser Asp Asp Asn Val Phe Val Gly Ala Pro Thr Gly Ser Gly Lys
 1395 1400 1405
 Thr Ile Cys Ala Glu Phe Ala Ile Leu Arg Met Leu Leu Gln Asn Ser
 1410 1415 1420
 Glu Gly Arg Cys Val Tyr Ile Thr Pro Met Arg Leu Trp Gln Glu Gln
 1425 1430 1435 1440
 Val Tyr Met Asp Trp Tyr Glu Lys Phe Gln Asp Arg Leu Asn Lys Lys
 1445 1450 1455
 Val Val Leu Leu Thr Gly Glu Thr Ser Thr Asp Leu Lys Leu Leu Gly
 1460 1465 1470
 Lys Gly Asn Ile Ile Ile Ser Thr Pro Glu Lys Trp Asp Ile Leu Ser
 1475 1480 1485
 Arg Arg Trp Lys Gln Arg Lys Asn Val Gln Asn Ile Asn Leu Phe Val
 1490 1495 1500
 Val Asp Glu Val His Leu Ile Gly Gly Glu Asn Gly Pro Val Leu Glu
 1505 1510 1515 1520
 Val Ile Cys Ser Arg Met Arg Tyr Ile Ser Ser Gln Ile Glu Arg Pro
 1525 1530 1535
 Ile Arg Ile Val Ala Leu Ser Ser Ser Leu Ser Asn Ala Lys Asp Val
 1540 1545 1550
 Ala His Trp Leu Gly Cys Ser Ala Thr Ser Thr Phe Asn Phe His Pro
 1555 1560 1565
 Asn Val Arg Pro Val Pro Leu Glu Leu His Ile Gln Gly Phe Asn Ile
 1570 1575 1580
 Ser His Thr Gln Thr Arg Leu Leu Ser Met Ala Lys Pro Val Phe His
 1585 1590 1595 1600
 Ala Ile Thr Lys His Ser Pro Lys Lys Pro Val Ile Val Phe Val Pro
 1605 1610 1615
 Ser Arg Lys Gln Thr Arg Leu Thr Ala Ile Asp Ile Leu Thr Thr Cys
 1620 1625 1630
 Ala Ala Asp Ile Gln Arg Gln Arg Phe Leu His Cys Thr Glu Lys Asp
 1635 1640 1645
 Leu Ile Pro Tyr Leu Glu Lys Leu Ser Asp Ser Thr Leu Lys Glu Thr
 1650 1655 1660
 Leu Leu Asn Gly Val Gly Tyr Leu His Glu Gly Leu Ser Pro Met Glu
 1665 1670 1675 1680
 Arg Arg Leu Val Glu Gln Leu Phe Ser Ser Gly Ala Ile Gln Val Val
 1685 1690 1695
 Val Ala Ser Arg Ser Leu Cys Trp Gly Met Asn Val Ala Ala His Leu
 1700 1705 1710
 Val Ile Ile Met Asp Thr Leu Tyr Tyr Asn Gly Lys Ile His Ala Tyr
 1715 1720 1725
 Val Asp Tyr Pro Ile Tyr Asp Val Leu Gln Met Val Gly His Ala Asn
 1730 1735 1740

Arg Pro Leu Gln Asp Asp Glu Gly Arg Cys Val Ile Met Cys Gln Gly
 1745 1750 1755 1760
 Ser Lys Lys Asp Phe Phe Lys Lys Phe Leu Tyr Glu Pro Leu Pro Val
 1765 1770 1775
 Glu Ser His Leu Asp His Cys Met His Asp His Phe Asn Ala Glu Ile
 1780 1785 1790
 Val Thr Lys Thr Ile Glu Asn Lys Gln Asp Ala Val Asp Tyr Leu Thr
 1795 1800 1805
 Trp Thr Phe Leu Tyr Arg Arg Met Thr Gln Asn Pro Asn Tyr Tyr Asn
 1810 1815 1820
 Leu Gln Gly Ile Ser His Arg His Leu Ser Asp His Leu Ser Glu Leu
 1825 1830 1835 1840
 Val Glu Gln Thr Leu Ser Asp Leu Glu Gln Ser Lys Cys Ile Ser Ile
 1845 1850 1855
 Glu Asp Glu Met Asp Val Ala Pro Leu Asn Leu Gly Met Ile Ala Ala
 1860 1865 1870
 Tyr Tyr Tyr Ile Asn Tyr Thr Thr Ile Glu Leu Phe Ser Met Ser Leu
 1875 1880 1885
 Asn Ala Lys Thr Lys Val Arg Gly Leu Ile Glu Ile Ile Ser Asn Ala
 1890 1895 1900
 Ala Glu Tyr Glu Asn Ile Pro Ile Arg His His Glu Asp Asn Leu Leu
 1905 1910 1915 1920
 Arg Gln Leu Ala Gln Lys Val Pro His Lys Leu Asn Asn Pro Lys Phe
 1925 1930 1935
 Asn Asp Pro His Val Lys Thr Asn Leu Leu Leu Gln Ala His Leu Ser
 1940 1945 1950
 Arg Met Gln Leu Ser Ala Glu Leu Gln Ser Asp Thr Glu Glu Ile Leu
 1955 1960 1965
 Ser Lys Ala Ile Arg Leu Ile Gln Ala Cys Val Asp Val Leu Ser Ser
 1970 1975 1980
 Asn Gly Trp Leu Ser Pro Ala Leu Ala Ala Met Glu Leu Ala Gln Met
 1985 1990 1995 2000
 Val Thr Gln Ala Met Trp Ser Glu Asp Ser Tyr Leu Arg Arg Leu Pro
 2005 2010 2015
 Pro Phe Pro Ser Gly Leu Phe Lys Arg Cys Thr Asp Lys Gly Val Glu
 2020 2025 2030
 Ser Val Phe Asp Ile Met Glu Met Glu Asp Glu Glu Arg Asn Ala Leu
 2035 2040 2045
 Leu Gln Leu Thr Asp Ser Gln Ile Ala Asp Val Ala Arg Phe Cys Asn
 2050 2055 2060
 Arg Tyr Pro Asn Ile Glu Leu Ser Tyr Glu Val Val Asp Lys Asp Ser
 2065 2070 2075 2080
 Ile Arg Ser Gly Gly Pro Val Val Val Leu Val Gln Leu Glu Arg Glu
 2085 2090 2095
 Glu Glu Val Thr Gly Pro Val Ile Ala Pro Leu Phe Pro Gln Lys Arg
 2100 2105 2110
 Glu Glu Gly Trp Trp Val Val Ile Gly Asp Ala Lys Ser Asn Ser Leu
 2115 2120 2125
 Ile Ser Ile Lys Arg Leu Thr Leu Gln Gln Lys Ala Lys Val Lys Leu
 2130 2135 2140
 Asp Phe Val Ala Pro Ala Thr Gly Gly Arg His Asn Thr Leu Tyr Phe
 2145 2150 2155 2160
 Met Ser Asp Ala Tyr Met Gly Cys Asp Gln Glu Tyr Lys Phe Ser Val
 2165 2170 2175
 Asp Val Lys Glu Ala Glu Thr Asp Ser Asp Ser Asp *
 2180 2185 2188

<210> 1651

<211> 2175

<212> PRT

<213> Homo sapiens

<400> 1651

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Met Ala Asp Val Thr Ala Arg Ser Leu Gln Tyr Glu Tyr Lys Ala Asn
 1          5          10          15
Ser Asn Leu Val Leu Gln Ala Asp Arg Ser Leu Ile Asp Arg Thr Arg
          20          25          30
Arg Asp Glu Pro Thr Gly Glu Val Leu Ser Leu Val Gly Lys Leu Glu
          35          40          45
Gly Thr Arg Met Gly Asp Lys Ala Gln Arg Thr Lys Pro Gln Met Gln
          50          55          60
Glu Glu Arg Arg Ala Lys Arg Arg Lys Arg Asp Glu Asp Arg His Asp
          65          70          75          80
Ile Asn Lys Met Lys Gly Tyr Thr Leu Leu Ser Glu Gly Ile Asp Glu
          85          90          95
Met Val Gly Ile Ile Tyr Lys Pro Lys Thr Lys Glu Thr Arg Glu Thr
          100          105          110
Tyr Glu Val Leu Leu Ser Phe Ile Gln Ala Ala Leu Gly Asp Gln Pro
          115          120          125
Arg Asp Ile Leu Cys Gly Ala Ala Asp Glu Val Leu Ala Val Leu Lys
          130          135          140
Asn Glu Lys Leu Arg Asp Lys Glu Arg Arg Lys Glu Ile Asp Leu Leu
          145          150          155          160
Leu Gly Gln Thr Asp Asp Thr Arg Tyr His Val Leu Val Asn Leu Gly
          165          170          175
Lys Lys Ile Thr Asp Tyr Gly Gly Asp Lys Glu Ile Gln Asn Met Asp
          180          185          190
Asp Asn Ile Asp Glu Thr Tyr Gly Val Asn Val Gln Phe Glu Ser Asp
          195          200          205
Glu Glu Glu Gly Asp Glu Asp Val Tyr Gly Glu Val Arg Glu Glu Ala
          210          215          220
Ser Asp Asp Asp Met Glu Gly Asp Glu Ala Val Val Arg Cys Thr Leu
          225          230          235          240
Ser Ala Asn Met Tyr Val Asp Glu Ile Leu Val Trp Cys Ala Ser Glu
          245          250          255
Leu Asn Ile Pro Glu Phe Phe Pro Leu Glu Ser Pro His Lys Lys Val
          260          265          270
Gly Tyr Gly Leu Ser Ser Arg Thr Trp Leu Gln Gly Gly Gly Lys Val
          275          280          285
Ile Glu Ala Gly Arg Asp Leu Leu Val Ala Ser Gly Glu Leu Met Ser
          290          295          300
Ser Lys Lys Lys Asp Leu His Pro Arg Asp Ile Asp Ala Phe Trp Leu
          305          310          315          320
Gln Arg Gln Leu Ser Arg Phe Tyr Asp Asp Ala Ile Val Ser Gln Lys
          325          330          335
Lys Ala Asp Glu Val Leu Glu Ile Leu Lys Thr Ala Ser Asp Asp Arg
          340          345          350
Glu Cys Glu Asn Gln Leu Val Leu Leu Leu Gly Phe Asn Thr Phe Asp
          355          360          365
Phe Ile Lys Val Leu Arg Gln His Arg Met Met Ile Leu Tyr Cys Thr
          370          375          380
Leu Leu Ala Ser Ala Gln Ser Glu Ala Glu Lys Glu Arg Ile Met Gly
          385          390          395          400
Lys Met Glu Ala Asp Pro Glu Leu Ser Lys Phe Leu Tyr Gln Leu His
          405          410          415
Glu Thr Glu Lys Glu Asp Leu Ile Arg Glu Glu Arg Ser Arg Arg Glu
          420          425          430
Arg Val Arg Gln Ser Arg Met Asp Thr Asp Leu Glu Thr Met Asp Leu
          435          440          445
Asp Gln Gly Gly Glu Ala Leu Ala Pro Arg Gln Val Leu Asp Leu Glu
          450          455          460
Asp Leu Val Phe Thr Gln Gly Ser His Phe Met Ala Asn Lys Arg Cys
          465          470          475          480
Gln Leu Pro Asp Gly Ser Phe Arg Arg Gln Arg Lys Gly Tyr Glu Glu
          485          490          495

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Val	His	Val	Pro	Ala	Leu	Lys	Pro	Lys	Pro	Phe	Gly	Ser	Glu	Glu	Gln
			500					505					510		
Leu	Leu	Pro	Val	Glu	Lys	Leu	Pro	Lys	Tyr	Ala	Gln	Ala	Gly	Phe	Glu
		515					520					525			
Gly	Phe	Lys	Thr	Leu	Asn	Arg	Ile	Gln	Ser	Lys	Leu	Tyr	Arg	Ala	Ala
	530					535					540				
Leu	Glu	Thr	Asp	Glu	Asn	Leu	Leu	Leu	Cys	Ala	Pro	Thr	Gly	Ala	Gly
545					550					555					560
Lys	Thr	Asn	Val	Ala	Leu	Met	Cys	Met	Leu	Arg	Glu	Ile	Gly	Lys	His
				565					570					575	
Ile	Asn	Met	Asp	Gly	Thr	Ile	Asn	Val	Asp	Asp	Phe	Lys	Ile	Ile	Tyr
			580					585					590		
Ile	Ala	Pro	Met	Arg	Ser	Leu	Val	Gln	Glu	Met	Val	Gly	Ser	Phe	Gly
		595					600					605			
Lys	Arg	Leu	Ala	Thr	Tyr	Gly	Ile	Thr	Val	Ala	Glu	Leu	Thr	Gly	Asp
	610					615					620				
His	Gln	Leu	Cys	Lys	Glu	Glu	Ile	Ser	Ala	Thr	Gln	Ile	Ile	Val	Cys
625					630					635					640
Thr	Pro	Glu	Lys	Trp	Asp	Ile	Ile	Thr	Arg	Lys	Val	Asp	Glu	Ile	His
				645					650					655	
Leu	Leu	His	Asp	Asp	Arg	Gly	Pro	Val	Leu	Glu	Ala	Leu	Val	Ala	Arg
			660					665					670		
Ala	Ile	Arg	Asn	Ile	Glu	Met	Thr	Gln	Glu	Asp	Val	Arg	Leu	Ile	Gly
		675					680					685			
Leu	Ser	Ala	Thr	Leu	Pro	Asn	Tyr	Glu	Asp	Val	Ala	Thr	Phe	Leu	Arg
	690					695				700					
Val	Asp	Pro	Ala	Lys	Gly	Leu	Phe	Tyr	Phe	Asp	Asn	Ser	Phe	Arg	Pro
705					710					715					720
Val	Pro	Leu	Glu	Gln	Thr	Tyr	Val	Gly	Ile	Thr	Glu	Lys	Lys	Ala	Ile
				725					730					735	
Lys	Arg	Phe	Gln	Ile	Met	Asn	Glu	Ile	Val	Tyr	Glu	Lys	Ile	Met	Glu
			740					745					750		
His	Ala	Gly	Lys	Asn	Gln	Val	Leu	Val	Phe	Val	His	Ser	Arg	Lys	Glu
		755					760					765			
Thr	Gly	Lys	Thr	Ala	Arg	Ala	Ile	Arg	Asp	Met	Cys	Leu	Glu	Lys	Asp
	770					775					780				
Thr	Leu	Gly	Leu	Phe	Leu	Arg	Glu	Gly	Ser	Ala	Ser	Thr	Glu	Val	Leu
785					790					795					800
Arg	Thr	Glu	Ala	Glu	Gln	Cys	Lys	Asn	Leu	Glu	Leu	Lys	Asp	Leu	Leu
				805					810					815	
Pro	Tyr	Gly	Phe	Ala	Ile	His	His	Ala	Gly	Met	Thr	Arg	Val	Asp	Arg
			820					825					830		
Thr	Leu	Val	Glu	Asp	Leu	Phe	Ala	Asp	Lys	His	Ile	Gln	Val	Leu	Val
		835					840					845			
Ser	Thr	Ala	Thr	Leu	Ala	Trp	Gly	Val	Asn	Leu	Pro	Ala	His	Thr	Val
	850					855					860				
Ile	Ile	Lys	Gly	Thr	Gln	Val	Tyr	Ser	Pro	Glu	Lys	Gly	Arg	Trp	Thr
865					870					875					880
Glu	Leu	Gly	Ala	Leu	Asp	Ile	Leu	Gln	Met	Leu	Gly	Arg	Ala	Gly	Arg
				885					890					895	
Pro	Gln	Tyr	Asp	Thr	Lys	Gly	Glu	Gly	Ile	Leu	Ile	Thr	Ser	His	Gly
			900					905					910		
Glu	Leu	Gln	Tyr	Tyr	Leu	Ser	Leu	Leu	Asn	Gln	Gln	Leu	Pro	Ile	Glu
		915					920					925			
Ser	Gln	Met	Val	Ser	Lys	Leu	Pro	Asp	Met	Leu	Asn	Ala	Glu	Ile	Val
	930					935					940				
Leu	Gly	Asn	Val	Gln	Asn	Ala	Lys	Asp	Ala	Val	Asn	Trp	Leu	Gly	Tyr
945					950					955					960
Ala	Tyr	Leu	Tyr	Ile	Arg	Met	Leu	Arg	Ser	Pro	Thr	Leu	Tyr	Gly	Ile
				965					970					975	
Ser	His	Asp	Asp	Leu	Lys	Gly	Asp	Pro	Leu	Leu	Asp	Gln	Arg	Arg	Leu
			980					985					990		
Asp	Leu	Val	His	Thr	Ala	Ala	Leu	Met	Leu	Asp	Lys	Asn	Asn	Leu	Val
		995					1000								

Lys Tyr Asp Lys Lys Thr Gly Asn Phe Gln Val Thr Glu Leu Gly Arg
1010 1015 1020
Ile Ala Ser His Tyr Tyr Ile Thr Asn Asp Thr Val Gln Thr Tyr Asn
1025 1030 1035 1040
Gln Leu Leu Lys Pro Thr Leu Ser Glu Ile Glu Leu Phe Arg Val Phe
1045 1050 1055
Ser Leu Ser Ser Glu Phe Lys Asn Ile Thr Val Arg Glu Glu Glu Lys
1060 1065 1070
Leu Glu Leu Gln Lys Leu Leu Glu Arg Val Pro Ile Pro Val Lys Glu
1075 1080 1085
Ser Ile Glu Glu Pro Ser Ala Lys Ile Asn Val Leu Leu Gln Ala Phe
1090 1095 1100
Ile Ser Gln Leu Lys Leu Glu Gly Phe Ala Leu Met Ala Asp Met Val
1105 1110 1115 1120
Tyr Val Thr Gln Ser Ala Gly Arg Leu Met Arg Ala Ile Phe Glu Ile
1125 1130 1135
Val Leu Asn Arg Gly Trp Ala Gln Leu Thr Asp Lys Thr Leu Asn Leu
1140 1145 1150
Cys Lys Met Ile Asp Lys Arg Met Trp Gln Ser Met Cys Pro Leu Arg
1155 1160 1165
Gln Phe Arg Lys Leu Pro Glu Glu Val Val Lys Lys Ile Glu Lys Lys
1170 1175 1180
Asn Phe Pro Phe Glu Arg Leu Tyr Asp Leu Asn His Asn Glu Ile Gly
1185 1190 1195 1200
Glu Leu Ile Arg Met Pro Lys Met Gly Lys Thr Ile His Lys Tyr Val
1205 1210 1215
His Leu Phe Pro Lys Leu Glu Leu Ser Val His Leu Gln Pro Ile Thr
1220 1225 1230
Arg Ser Thr Leu Lys Val Glu Leu Thr Ile Thr Pro Asp Phe Gln Trp
1235 1240 1245
Asp Glu Lys Val His Gly Ser Ser Glu Ala Phe Trp Ile Leu Val Glu
1250 1255 1260
Asp Val Asp Ser Glu Val Ile Leu His His Glu Tyr Phe Leu Leu Lys
1265 1270 1275 1280
Ala Lys Tyr Ala Gln Asp Glu His Leu Ile Thr Phe Phe Val Pro Val
1285 1290 1295
Phe Glu Pro Leu Pro Pro Gln Tyr Phe Ile Arg Val Val Ser Asp Arg
1300 1305 1310
Trp Leu Ser Cys Glu Thr Gln Leu Pro Val Ser Phe Arg His Leu Ile
1315 1320 1325
Leu Pro Glu Lys Tyr Pro Pro Pro Thr Glu Leu Leu Asp Leu Gln Pro
1330 1335 1340
Leu Pro Val Ser Ala Leu Arg Asn Ser Ala Phe Glu Ser Leu Tyr Gln
1345 1350 1355 1360
Asp Lys Phe Pro Phe Phe Asn Pro Ile Gln Thr Gln Val Phe Asn Thr
1365 1370 1375
Val Tyr Asn Ser Asp Asp Asn Val Phe Val Gly Ala Pro Thr Gly Ser
1380 1385 1390
Gly Lys Thr Ile Cys Ala Glu Phe Ala Ile Leu Arg Met Leu Leu Gln
1395 1400 1405
Ser Ser Glu Gly Arg Cys Val Tyr Ile Thr Pro Met Glu Ala Leu Ala
1410 1415 1420
Glu Gln Val Tyr Met Asp Trp Tyr Glu Lys Phe Gln Asp Arg Leu Asn
1425 1430 1435 1440
Lys Lys Val Val Leu Leu Thr Gly Glu Thr Ser Thr Asp Leu Lys Leu
1445 1450 1455
Leu Gly Lys Gly Asn Ile Ile Ile Ser Thr Pro Glu Lys Trp Asp Ile
1460 1465 1470
Leu Ser Arg Arg Trp Lys Gln Arg Lys Asn Val Gln Asn Ile Asn Leu
1475 1480 1485
Phe Val Val Asp Glu Val His Leu Ile Gly Gly Glu Asn Gly Pro Val
1490 1495 1500
Leu Glu Val Ile Cys Ser Arg Met Arg Tyr Ile Ser Ser Gln Ile Glu
1505 1510 1515 1520

Arg Pro Ile Arg Ile Val Ala Leu Ser Ser Ser Leu Ser Asn Ala Lys
 1525 1530 1535
 Asp Val Ala His Trp Leu Gly Cys Ser Ala Thr Ser Thr Phe Asn Phe
 1540 1545 1550
 His Pro Asn Val Arg Pro Val Pro Leu Glu Leu His Ile Gln Gly Phe
 1555 1560 1565
 Asn Ile Ser His Thr Gln Thr Arg Leu Leu Ser Met Ala Lys Pro Val
 1570 1575 1580
 Tyr His Ala Ile Thr Lys His Ser Pro Lys Lys Pro Val Ile Val Phe
 1585 1590 1595 1600
 Val Pro Ser Arg Lys Gln Thr Arg Leu Thr Ala Ile Asp Ile Leu Thr
 1605 1610 1615
 Thr Cys Ala Ala Asp Ile Gln Arg Gln Arg Phe Leu His Cys Thr Glu
 1620 1625 1630
 Lys Asp Leu Ile Pro Tyr Leu Glu Lys Leu Ser Asp Ser Thr Leu Lys
 1635 1640 1645
 Glu Thr Leu Leu Asn Gly Val Gly Tyr Leu His Glu Gly Leu Ser Pro
 1650 1655 1660
 Met Glu Arg Arg Leu Val Glu Gln Leu Phe Ser Ser Gly Ala Ile Gln
 1665 1670 1675 1680
 Val Val Val Ala Ser Arg Ser Leu Cys Trp Gly Met Asn Val Ala Ala
 1685 1690 1695
 His Leu Val Ile Ile Met Asp Thr Gln Tyr Tyr Asn Gly Lys Ile His
 1700 1705 1710
 Ala Tyr Val Asp Tyr Pro Ile Tyr Asp Val Leu Gln Met Val Gly His
 1715 1720 1725
 Ala Asn Arg Pro Leu Gln Asp Asp Glu Gly Arg Cys Val Ile Met Cys
 1730 1735 1740
 Gln Gly Ser Lys Lys Asp Phe Phe Lys Lys Phe Leu Tyr Glu Pro Leu
 1745 1750 1755 1760
 Pro Val Glu Ser His Leu Asp His Cys Met His Asp His Phe Asn Ala
 1765 1770 1775
 Glu Ile Val Thr Lys Thr Ile Glu Asn Lys Gln Asp Ala Val Asp Tyr
 1780 1785 1790
 Leu Thr Trp Thr Phe Leu Tyr Arg Arg Met Thr Gln Asn Pro Asn Tyr
 1795 1800 1805
 Tyr Asn Leu Gln Gly Ile Ser His Arg His Leu Ser Asp His Leu Ser
 1810 1815 1820
 Glu Leu Val Glu Gln Thr Leu Ser Asp Leu Glu Gln Ser Lys Cys Ile
 1825 1830 1835 1840
 Ser Ile Glu Asp Glu Met Asp Val Ala Pro Leu Asn Leu Gly Met Ile
 1845 1850 1855
 Ala Ala Tyr Tyr Tyr Ile Asn Tyr Thr Thr Ile Glu Leu Phe Ser Met
 1860 1865 1870
 Ser Leu Asn Ala Lys Thr Lys Val Arg Gly Leu Ile Glu Ile Ile Ser
 1875 1880 1885
 Asn Ala Ala Glu Tyr Glu Asn Ile Pro Ile Arg His His Glu Asp Asn
 1890 1895 1900
 Leu Leu Arg Gln Leu Ala Gln Lys Val Pro His Lys Leu Asn Asn Pro
 1905 1910 1915 1920
 Lys Phe Asn Asp Pro His Val Lys Thr Asn Leu Leu Leu Gln Ala His
 1925 1930 1935
 Leu Ser Arg Met Gln Leu Ser Ala Glu Leu Gln Ser Asp Thr Glu Glu
 1940 1945 1950
 Ile Leu Ser Lys Ala Ile Arg Leu Ile Gln Ala Cys Val Asp Val Leu
 1955 1960 1965
 Ser Ser Asn Gly Trp Leu Ser Pro Ala Leu Ala Ala Met Glu Leu Ala
 1970 1975 1980
 Gln Met Val Thr Gln Ala Met Trp Ser Lys Asp Ser Tyr Leu Lys Gln
 1985 1990 1995 2000
 Leu Pro His Phe Thr Ser Glu His Ile Lys Arg Cys Thr Asp Lys Gly
 2005 2010 2015
 Val Glu Ser Val Phe Asp Ile Met Glu Met Glu Asp Glu Glu Arg Asn
 2020 2025 2030

Ala Leu Leu Gln Leu Thr Asp Ser Gln Ile Ala Asp Val Ala Arg Phe
 2035 2040 2045
 Cys Asn Arg Tyr Pro Asn Ile Glu Leu Ser Tyr Glu Val Val Asp Lys
 2050 2055 2060
 Asp Ser Ile Arg Ser Gly Gly Pro Val Val Val Leu Val Gln Leu Glu
 2065 2070 2075 2080
 Arg Glu Glu Glu Val Thr Gly Pro Val Ile Ala Pro Leu Phe Pro Gln
 2085 2090 2095
 Lys Arg Glu Glu Gly Trp Trp Val Val Ile Gly Asp Ala Lys Ser Asn
 2100 2105 2110
 Ser Leu Ile Ser Ile Lys Arg Leu Thr Leu Gln Gln Lys Ala Lys Val
 2115 2120 2125
 Lys Leu Asp Phe Val Ala Pro Ala Thr Gly Ala His Asn Tyr Thr Leu
 2130 2135 2140
 Tyr Phe Met Ser Asp Ala Tyr Met Gly Cys Asp Gln Glu Tyr Lys Phe
 2145 2150 2155 2160
 Ser Val Asp Val Lys Glu Ala Glu Thr Asp Ser Asp Ser Asp *
 2165 2170 2174

<210> 1652
 <211> 183
 <212> PRT
 <213> Homo sapiens

<400> 1652
 Met Ile Val Leu Gly Phe Ser Asn Pro Ile Asn Trp Val Arg Thr Arg
 1 5 10 15
 Ile Lys Ala Phe Leu Ile Trp Ala Tyr Phe Asp Lys Glu Phe Ser Ile
 20 25 30
 Thr Glu Phe Ser Glu Gly Ala Lys Gln Ala Phe Ala His Val Ser Lys
 35 40 45
 Leu Leu Ser Gln Cys Lys Phe Asp Leu Leu Glu Glu Leu Val Ala Lys
 50 55 60
 Glu Val Leu His Ala Leu Lys Glu Lys Val Thr Ser Leu Pro Asp Asn
 65 70 75 80
 His Lys Asn Ala Leu Ala Ala Asn Ile Asp Glu Ile Val Phe Thr Ser
 85 90 95
 Thr Gly Asp Ile Ser Ile Tyr Tyr Asp Glu Lys Gly Arg Lys Phe Val
 100 105 110
 Asn Ile Leu Met Cys Phe Trp Tyr Leu Thr Ser Ala Asn Ile Pro Ser
 115 120 125
 Glu Thr Leu Arg Gly Ala Ser Val Phe Gln Val Lys Leu Gly Asn Gln
 130 135 140
 Asn Val Glu Thr Lys Gln Leu Leu Ser Ala Ser Tyr Glu Phe Gln Arg
 145 150 155 160
 Glu Phe Thr Gln Gly Val Lys Pro Asp Trp Thr Ile Ala Arg Ile Glu
 165 170 175
 His Ser Lys Leu Leu Glu *
 180 182

<210> 1653
 <211> 1394
 <212> PRT
 <213> Homo sapiens

<400> 1653
 Met Pro Asn Ser Glu Arg His Gly Gly Lys Lys Asp Gly Ser Gly Gly
 1 5 10 15

3513

Leu	Pro	Thr	Ile	Ala	Ser	Pro	Pro	Pro	Pro	Leu	Pro	Thr	Thr	Thr	Pro
530						535				540					
Pro	Pro	Gln	Thr	Pro	Pro	Leu	Pro	Pro	Leu	Pro	Pro	Ile	Pro	Ala	Leu
545					550					555					560
Pro	Gln	Gln	Pro	Pro	Leu	Pro	Pro	Ser	Gln	Pro	Ala	Phe	Ser	Gln	Val
					565				570					575	
Pro	Ala	Ser	Ser	Thr	Ser	Thr	Leu	Pro	Pro	Ser	Thr	His	Ser	Lys	Thr
				580				585					590		
Ser	Ala	Val	Ser	Ser	Gln	Ala	Asn	Ser	Gln	Pro	Pro	Val	Gln	Val	Ser
		595					600					605			
Val	Lys	Thr	Gln	Val	Ser	Val	Thr	Ala	Ala	Ile	Pro	His	Leu	Lys	Thr
610						615					620				
Ser	Thr	Leu	Pro	Pro	Leu	Pro	Leu	Pro	Pro	Leu	Leu	Pro	Gly	Gly	Asp
625					630					635					640
Asp	Met	Asp	Ser	Pro	Lys	Glu	Thr	Leu	Pro	Ser	Lys	Pro	Val	Lys	Lys
				645					650					655	
Glu	Lys	Glu	Gln	Arg	Thr	Arg	His	Leu	Leu	Thr	Asp	Leu	Pro	Leu	Pro
			660					665					670		
Pro	Glu	Leu	Pro	Gly	Gly	Asp	Leu	Ser	Pro	Pro	Asp	Ser	Pro	Glu	Pro
		675					680					685			
Lys	Ala	Ile	Thr	Pro	Pro	Gln	Gln	Pro	Tyr	Lys	Lys	Arg	Pro	Lys	Ile
690						695					700				
Cys	Cys	Pro	Arg	Tyr	Gly	Glu	Arg	Arg	Gln	Thr	Glu	Ser	Asp	Trp	Gly
705					710					715					720
Lys	Arg	Cys	Val	Asp	Lys	Phe	Asp	Ile	Ile	Gly	Ile	Ile	Gly	Glu	Gly
				725				730						735	
Thr	Tyr	Gly	Gln	Val	Tyr	Lys	Ala	Arg	Asp	Lys	Asp	Thr	Gly	Glu	Leu
			740					745					750		
Val	Ala	Leu	Lys	Lys	Val	Arg	Leu	Asp	Asn	Glu	Lys	Glu	Gly	Phe	Pro
		755					760					765			
Ile	Thr	Ala	Ile	Arg	Glu	Ile	Lys	Ile	Leu	Arg	Gln	Leu	Ile	His	Arg
770						775					780				
Ser	Val	Val	Asn	Met	Lys	Glu	Ile	Val	Thr	Asp	Lys	Gln	Asp	Ala	Leu
785					790					795					800
Asp	Phe	Lys	Lys	Asp	Lys	Gly	Ala	Phe	Tyr	Leu	Val	Phe	Glu	Tyr	Met
				805					810					815	
Asp	His	Asp	Leu	Met	Gly	Leu	Leu	Glu	Ser	Gly	Leu	Val	His	Phe	Ser
			820					825					830		
Glu	Asp	His	Ile	Lys	Ser	Phe	Met	Lys	Gln	Leu	Met	Glu	Gly	Leu	Glu
		835					840					845			
Tyr	Cys	His	Lys	Lys	Asn	Phe	Leu	His	Arg	Asp	Ile	Lys	Cys	Ser	Asn
850					855						860				
Ile	Leu	Leu	Asn	Asn	Ser	Gly	Gln	Ile	Lys	Leu	Ala	Asp	Phe	Gly	Leu
865					870					875					880
Ala	Arg	Leu	Tyr	Asn	Ser	Glu	Glu	Ser	Arg	Pro	Tyr	Thr	Asn	Lys	Val
				885					890					895	
Ile	Thr	Leu	Trp	Tyr	Arg	Pro	Pro	Glu	Leu	Leu	Leu	Gly	Glu	Glu	Arg
			900					905					910		
Tyr	Thr	Pro	Ala	Ile	Asp	Val	Trp	Ser	Cys	Gly	Cys	Ile	Leu	Gly	Glu
		915					920					925			
Leu	Phe	Thr	Lys	Lys	Pro	Ile	Phe	Gln	Ala	Asn	Leu	Glu	Leu	Ala	Gln
930					935						940				
Leu	Glu	Leu	Ile	Ser	Arg	Leu	Cys	Gly	Ser	Pro	Cys	Pro	Ala	Val	Trp
945					950					955					960
Pro	Asp	Val	Ile	Lys	Leu	Pro	Tyr	Phe	Asn	Thr	Met	Lys	Pro	Lys	Lys
				965					970					975	
Gln	Tyr	Arg	Arg	Arg	Leu	Arg	Glu	Glu	Phe	Ser	Phe	Ile	Pro	Ser	Ala
			980					985					990		
Ala	Leu	Asp	Leu	Leu	Asp	His	Met	Leu	Thr	Leu	Asp	Pro	Ser	Lys	Arg
		995				1000					1005				
Cys	Thr	Ala	Glu	Gln	Thr	Leu	Gln	Ser	Asp	Phe	Leu	Lys	Asp	Val	Glu
1010						1015					1020				
Leu	Ser	Lys	Met	Ala	Pro	Pro	Asp	Leu	Pro	His	Trp	Gln	Asp	Cys	His
1025					1030					1035				1040	

Glu Leu Trp Ser Lys Lys Arg Arg Arg Gln Arg Gln Ser Gly Val Val
 1045 1050 1055
 Val Glu Glu Pro Pro Pro Ser Lys Thr Ser Arg Lys Glu Thr Thr Ser
 1060 1065 1070
 Gly Thr Ser Thr Glu Pro Val Lys Asn Ser Ser Pro Ala Pro Pro Gln
 1075 1080 1085
 Pro Ala Pro Gly Lys Val Glu Ser Gly Ala Gly Asp Ala Ile Gly Leu
 1090 1095 1100
 Ala Asp Ile Thr Gln Gln Leu Asn Gln Ser Glu Leu Ala Val Leu Leu
 1105 1110 1115 1120
 Asn Leu Leu Gln Ser Gln Thr Asp Leu Ser Ile Pro Gln Met Ala Gln
 1125 1130 1135
 Leu Leu Asn Ile His Ser Asn Pro Glu Met Gln Gln Gln Leu Glu Ala
 1140 1145 1150
 Leu Asn Gln Ser Ile Ser Ala Leu Thr Glu Ala Thr Ser Gln Gln Gln
 1155 1160 1165
 Asp Ser Glu Thr Met Ala Pro Glu Glu Ser Leu Lys Glu Ala Pro Ser
 1170 1175 1180
 Ala Pro Val Ile Leu Pro Ser Ala Glu Gln Met Thr Leu Glu Ala Ser
 1185 1190 1195 1200
 Ser Thr Pro Ala Asp Met Gln Asn Ile Leu Ala Val Leu Leu Ser Gln
 1205 1210 1215
 Leu Met Lys Thr Gln Glu Pro Ala Gly Ser Leu Glu Glu Asn Asn Ser
 1220 1225 1230
 Asp Lys Asn Ser Gly Pro Gln Gly Pro Arg Arg Thr Pro Thr Met Pro
 1235 1240 1245
 Gln Glu Glu Ala Ala Ala Cys Pro Pro His Ile Leu Pro Pro Glu Lys
 1250 1255 1260
 Arg Pro Pro Glu Pro Pro Gly Pro Pro Pro Pro Pro Pro Pro Pro
 1265 1270 1275 1280
 Leu Val Glu Gly Asp Leu Ser Ser Ala Pro Gln Glu Leu Asn Pro Ala
 1285 1290 1295
 Val Thr Ala Ala Leu Leu Gln Leu Leu Ser Gln Pro Glu Ala Glu Pro
 1300 1305 1310
 Pro Gly His Leu Pro His Glu His Gln Ala Leu Arg Pro Met Glu Tyr
 1315 1320 1325
 Ser Thr Arg Pro Arg Pro Asn Arg Thr Tyr Gly Asn Thr Asp Gly Pro
 1330 1335 1340
 Glu Thr Gly Phe Ser Ala Ile Asp Thr Asp Glu Arg Asn Ser Gly Pro
 1345 1350 1355 1360
 Ala Leu Thr Glu Ser Leu Val Gln Thr Leu Val Lys Asn Arg Thr Phe
 1365 1370 1375
 Ser Gly Ser Leu Ser His Leu Gly Glu Ser Ser Ser Tyr Gln Gly Thr
 1380 1385 1390
 Gly *
 1393

<210> 1654
 <211> 102
 <212> PRT
 <213> Homo sapiens

<400> 1654
 Met Ser Asp Leu Glu Ala Lys Leu Ser Thr Glu His Leu Gly Asp Lys
 1 5 10 15
 Ile Lys Asp Glu Asp Ile Lys Leu Arg Val Ile Gly Gln Asp Ser Ser
 20 25 30
 Glu Ile His Phe Lys Val Lys Met Thr Thr Pro Leu Lys Lys Leu Lys
 35 40 45
 Lys Ser Tyr Cys Gln Arg Gln Gly Val Pro Val Asn Ser Leu Arg Phe
 50 55 60

Leu Phe Glu Gly Gln Arg Ile Ala Asp Asn His Thr Pro Glu Glu Leu
 65 70 75 80
 Gly Met Glu Glu Glu Asp Val Ile Glu Val Tyr Gln Glu Gln Ile Gly
 85 90 95
 Gly His Ser Thr Val *
 100 101

<210> 1655
 <211> 496
 <212> PRT
 <213> Homo sapiens

<400> 1655
 Met Pro His Gln Arg Pro Arg Thr Cys Ala Met Asn Pro Glu Leu Thr
 1 5 10 15
 Met Glu Ser Leu Gly Thr Leu His Gly Ala Arg Gly Gly Gly Ser Gly
 20 25 30
 Gly Gly Gly Gly Gly Gly Gly Gly Gly Gly Gly Gly Gly Pro Gly His
 35 40 45
 Glu Gln Glu Leu Leu Ala Ser Pro Ser Pro His His Ala Arg Arg Gly
 50 55 60
 Pro Arg Gly Ser Leu Arg Gly Pro Pro Pro Pro Pro Thr Ala His Gln
 65 70 75 80
 Glu Leu Gly Thr Ala Ala Ala Ala Ala Ala Ala Ser Arg Ser Ala
 85 90 95
 Met Val Thr Ser Met Ala Ser Ile Leu Asp Gly Gly Asp Tyr Arg Pro
 100 105 110
 Glu Leu Ser Ile Pro Leu His His Ala Met Ser Met Ser Cys Asp Ser
 115 120 125
 Ser Pro Pro Gly Met Gly Met Ser Asn Thr Tyr Thr Thr Leu Thr Pro
 130 135 140
 Leu Gln Pro Leu Pro Pro Ile Ser Thr Val Ser Asp Lys Phe His His
 145 150 155 160
 Pro His Pro His His His Pro His His His His His His His Gln
 165 170 175
 Arg Leu Ser Gly Asn Val Ser Gly Ser Phe Thr Leu Met Arg Asp Glu
 180 185 190
 Arg Gly Leu Pro Ala Met Asn Asn Leu Tyr Ser Pro Tyr Lys Glu Met
 195 200 205
 Pro Gly Met Ser Gln Ser Leu Ser Pro Leu Ala Ala Thr Pro Leu Gly
 210 215 220
 Asn Gly Leu Gly Gly Leu His Asn Ala Gln Gln Ser Leu Pro Asn Tyr
 225 230 235 240
 Gly Pro Pro Gly His Asp Lys Met Leu Ser Pro Asn Phe Asp Ala His
 245 250 255
 His Thr Ala Met Leu Thr Arg Gly Glu Gln His Leu Ser Arg Gly Leu
 260 265 270
 Gly Thr Pro Pro Ala Ala Met Met Ser His Leu Asn Gly Leu His His
 275 280 285
 Pro Gly His Thr Gln Ser His Gly Pro Val Leu Ala Pro Ser Arg Glu
 290 295 300
 Arg Pro Pro Ser Ser Ser Ser Gly Ser Gln Val Ala Thr Ser Gly Gln
 305 310 315 320
 Leu Glu Glu Ile Asn Thr Lys Glu Val Ala Gln Arg Ile Thr Ala Glu
 325 330 335
 Leu Lys Arg Tyr Ser Ile Pro Gln Ala Ile Phe Ala Gln Arg Val Leu
 340 345 350
 Cys Arg Ser Gln Gly Thr Leu Ser Asp Leu Leu Arg Asn Pro Lys Pro
 355 360 365
 Trp Ser Lys Leu Lys Ser Gly Arg Glu Thr Phe Arg Arg Met Trp Lys
 370 375 380

Trp	Leu	Gln	Glu	Pro	Glu	Phe	Gln	Arg	Met	Ser	Ala	Leu	Arg	Leu	Ala
385					390					395					400
Ala	Cys	Lys	Arg	Lys	Glu	Gln	Glu	Pro	Asn	Lys	Asp	Arg	Asn	Asn	Ser
				405					410					415	
Gln	Lys	Lys	Ser	Arg	Leu	Val	Phe	Thr	Asp	Leu	Gln	Arg	Arg	Thr	Leu
			420					425					430		
Phe	Ala	Ile	Phe	Lys	Glu	Asn	Lys	Arg	Pro	Ser	Lys	Glu	Met	Gln	Ile
		435					440					445			
Thr	Ile	Ser	Gln	Gln	Leu	Gly	Leu	Glu	Leu	Thr	Thr	Val	Ser	Asn	Phe
	450					455					460				
Phe	Met	Asn	Ala	Arg	Arg	Arg	Ser	Leu	Glu	Lys	Trp	Gln	Asp	Asp	Leu
465					470					475					480
Ser	Thr	Gly	Gly	Ser	Ser	Ser	Thr	Ser	Ser	Thr	Cys	Thr	Lys	Ala	*
				485				490						495	

<210> 1656
 <211> 709
 <212> PRT
 <213> Homo sapiens

<400> 1656

Met	Asp	Asn	Val	Gln	Ser	Lys	Arg	Arg	Arg	Tyr	Met	Glu	Glu	Glu	Tyr
1				5					10					15	
Glu	Ala	Glu	Phe	Gln	Val	Lys	Ile	Thr	Ala	Lys	Gly	Asp	Ile	Asn	Gln
			20					25					30		
Lys	Leu	Gln	Lys	Val	Ile	Gln	Trp	Leu	Leu	Glu	Glu	Lys	Leu	Cys	Ala
		35					40					45			
Leu	Gln	Cys	Ala	Val	Phe	Asp	Lys	Thr	Leu	Ala	Glu	Leu	Lys	Thr	Arg
	50					55				60					
Val	Glu	Lys	Ile	Glu	Cys	Asn	Lys	Arg	His	Lys	Thr	Val	Leu	Thr	Glu
65					70					75					80
Leu	Gln	Ala	Lys	Ile	Ala	Arg	Leu	Thr	Lys	Arg	Phe	Glu	Ala	Ala	Lys
				85					90					95	
Glu	Asp	Leu	Lys	Lys	Arg	His	Glu	His	Pro	Pro	Asn	Pro	Pro	Val	Ser
			100					105					110		
Pro	Gly	Lys	Thr	Val	Asn	Asp	Val	Asn	Ser	Asn	Asn	Asn	Met	Ser	Tyr
		115					120					125			
Arg	Asn	Ala	Gly	Thr	Val	Arg	Gln	Met	Leu	Glu	Ser	Lys	Arg	Asn	Val
	130					135					140				
Ser	Glu	Ser	Ala	Pro	Pro	Ser	Phe	Gln	Thr	Pro	Val	Asn	Thr	Val	Ser
145					150					155					160
Ser	Thr	Asn	Leu	Val	Thr	Pro	Pro	Ala	Val	Val	Ser	Ser	Gln	Pro	Lys
			165						170					175	
Leu	Gln	Thr	Pro	Val	Thr	Ser	Gly	Ser	Leu	Thr	Ala	Thr	Ser	Val	Leu
			180					185					190		
Pro	Ala	Pro	Asn	Thr	Ala	Thr	Val	Val	Ala	Thr	Thr	Gln	Val	Pro	Ser
		195					200					205			
Gly	Asn	Pro	Gln	Pro	Thr	Ile	Ser	Leu	Gln	Pro	Leu	Pro	Val	Ile	Leu
	210					215					220				
His	Val	Pro	Val	Ala	Val	Ser	Ser	Gln	Pro	Gln	Leu	Leu	Gln	Ser	His
225					230					235					240
Pro	Gly	Thr	Leu	Val	Thr	Asn	Gln	Pro	Ser	Gly	Asn	Val	Glu	Phe	Ile
			245						250					255	
Ser	Val	Gln	Ser	Pro	Pro	Thr	Val	Ser	Gly	Leu	Thr	Lys	Asn	Pro	Val
			260					265					270		
Ser	Leu	Pro	Ser	Leu	Pro	Asn	Pro	Thr	Lys	Pro	Asn	Asn	Val	Pro	Ser
		275					280					285			
Val	Pro	Ser	Pro	Ser	Ile	Gln	Arg	Asn	Pro	Thr	Ala	Ser	Ala	Ala	Pro
	290					295					300				
Leu	Gly	Thr	Thr	Leu	Ala	Val	Gln	Ala	Val	Pro	Thr	Ala	His	Ser	Ile
305					310					315					320

Val	Gln	Ala	Thr	Arg	Thr	Ser	Leu	Pro	Thr	Val	Gly	Pro	Ser	Gly	Leu
				325					330					335	
Tyr	Ser	Pro	Ser	Thr	Asn	Arg	Gly	Pro	Ile	Gln	Met	Lys	Ile	Pro	Ile
			340					345					350		
Ser	Ala	Phe	Ser	Thr	Ser	Ser	Ala	Ala	Glu	Gln	Asn	Ser	Asn	Thr	Thr
		355						360					365		
Pro	Arg	Ile	Glu	Asn	Gln	Thr	Asn	Lys	Thr	Ile	Asp	Ala	Ser	Val	Ser
		370					375				380				
Lys	Lys	Ala	Ala	Asp	Ser	Thr	Ser	Gln	Cys	Gly	Lys	Ala	Thr	Gly	Ser
385					390					395					400
Asp	Ser	Ser	Gly	Val	Ile	Asp	Leu	Thr	Met	Asp	Asp	Glu	Glu	Ser	Gly
			405						410						415
Ala	Ser	Gln	Asp	Pro	Lys	Lys	Leu	Asn	His	Thr	Pro	Val	Ser	Thr	Met
			420					425						430	
Ser	Ser	Ser	Gln	Pro	Val	Ser	Arg	Pro	Leu	Gln	Pro	Ile	Gln	Pro	Ala
		435					440					445			
Pro	Pro	Leu	Gln	Pro	Ser	Gly	Val	Pro	Thr	Ser	Gly	Pro	Ser	Gln	Thr
		450				455					460				
Thr	Ile	His	Leu	Leu	Pro	Thr	Ala	Pro	Thr	Thr	Val	Asn	Val	Thr	His
465					470					475					480
Arg	Pro	Val	Thr	Gln	Val	Thr	Thr	Arg	Leu	Pro	Val	Pro	Arg	Ala	Pro
				485					490					495	
Ala	Asn	His	Gln	Val	Val	Tyr	Thr	Thr	Leu	Pro	Ala	Pro	Pro	Ala	Gln
			500					505						510	
Ala	Pro	Leu	Arg	Gly	Thr	Val	Met	Gln	Ala	Pro	Ala	Val	Arg	Gln	Val
		515					520					525			
Asn	Pro	Gln	Asn	Ser	Val	Thr	Val	Arg	Val	Pro	Gln	Thr	Thr	Thr	Tyr
		530				535					540				
Val	Val	Asn	Asn	Gly	Leu	Thr	Leu	Gly	Ser	Thr	Gly	Pro	Gln	Leu	Thr
545					550					555					560
Val	His	His	Arg	Pro	Pro	Gln	Val	His	Thr	Glu	Pro	Pro	Arg	Pro	Val
			565						570					575	
His	Pro	Ala	Pro	Leu	Pro	Glu	Ala	Pro	Gln	Pro	Gln	Arg	Leu	Pro	Pro
			580					585					590		
Glu	Ala	Ala	Ser	Thr	Ser	Leu	Pro	Gln	Lys	Pro	His	Leu	Lys	Leu	Ala
		595					600					605			
Arg	Val	Gln	Ser	Gln	Asn	Gly	Ile	Val	Leu	Ser	Trp	Ser	Val	Leu	Glu
		610				615					620				
Val	Asp	Arg	Ser	Cys	Ala	Thr	Val	Asp	Ser	Tyr	His	Leu	Tyr	Ala	Tyr
625					630					635					640
His	Glu	Glu	Pro	Ser	Ala	Thr	Val	Pro	Ser	Gln	Trp	Lys	Lys	Ile	Gly
			645						650					655	
Glu	Val	Lys	Ala	Leu	Pro	Leu	Pro	Met	Ala	Cys	Thr	Leu	Thr	Gln	Phe
			660					665						670	
Val	Ser	Gly	Ser	Lys	Tyr	Tyr	Phe	Ala	Val	Arg	Ala	Lys	Asp	Ile	Tyr
		675					680					685			
Gly	Arg	Phe	Gly	Pro	Phe	Cys	Asp	Pro	Gln	Ser	Thr	Asp	Val	Ile	Ser
		690				695						700			
Ser	Thr	Gln	Ser	Ser											
705				709											

<210> 1657

<211> 277

<212> PRT

<213> Homo sapiens

<400> 1657

Met	Gln	Pro	Phe	Ser	Ile	Pro	Val	Gln	Ile	Thr	Leu	Gln	Gly	Ser	Arg
1				5					10					15	
Arg	Arg	Gln	Gly	Arg	Thr	Ala	Phe	Pro	Ala	Ser	Gly	Lys	Lys	Arg	Glu
			20					25					30		

Thr Asp Tyr Ser Asp Gly Asp Pro Leu Asp Val His Lys Arg Leu Pro
 35 40 45
 Ser Ser Thr Gly Glu Asp Arg Ala Val Met Leu Gly Phe Ala Met Met
 50 55 60
 Gly Phe Ser Val Leu Met Phe Phe Leu Leu Gly Thr Thr Ile Leu Lys
 65 70 75 80
 Pro Phe Met Leu Ser Ile Gln Arg Glu Glu Ser Thr Cys Thr Ala Ile
 85 90 95
 His Thr Asp Ile Met Asp Asp Trp Leu Asp Cys Ala Phe Thr Cys Gly
 100 105 110
 Val His Cys His Gly Gln Gly Lys Tyr Pro Cys Leu Gln Val Phe Val
 115 120 125
 Asn Leu Ser His Pro Gly Gln Lys Ala Leu Leu His Tyr Asn Glu Glu
 130 135 140
 Ala Val Gln Ile Asn Pro Lys Cys Phe Tyr Thr Pro Lys Cys His Gln
 145 150 155 160
 Asp Arg Asn Asp Leu Leu Asn Ser Ala Leu Asp Ile Lys Glu Phe Phe
 165 170 175
 Asp His Lys Asn Gly Thr Pro Phe Ser Cys Phe Tyr Ser Pro Ala Ser
 180 185 190
 Gln Ser Glu Asp Val Ile Leu Ile Lys Lys Tyr Asp Gln Met Ala Ile
 195 200 205
 Phe His Cys Leu Phe Trp Pro Ser Leu Thr Leu Leu Gly Gly Ala Leu
 210 215 220
 Ile Val Gly Met Val Arg Leu Thr Gln His Leu Ser Leu Leu Cys Glu
 225 230 235 240
 Lys Tyr Ser Thr Val Val Arg Asp Glu Val Gly Gly Lys Val Pro Tyr
 245 250 255
 Ile Glu Gln His Gln Phe Lys Leu Cys Ile Met Arg Arg Ser Lys Gly
 260 265 270
 Arg Ala Glu Lys Ser
 275 277

<210> 1658
 <211> 292
 <212> PRT
 <213> Homo sapiens

<400> 1658
 Met Ala Cys Leu Ser Pro Ser Gln Leu Gln Lys Phe Gln Gln Asp Gly
 1 5 10 15
 Phe Leu Val Leu Glu Gly Phe Leu Ser Ala Glu Glu Cys Val Ala Met
 20 25 30
 Gln Gln Arg Ile Gly Glu Ile Val Ala Glu Met Asp Val Pro Leu His
 35 40 45
 Cys Arg Thr Glu Phe Ser Thr Gln Glu Glu Glu Gln Leu Arg Ala Gln
 50 55 60
 Gly Ser Thr Asp Tyr Phe Leu Ser Ser Gly Asp Lys Ile Arg Phe Phe
 65 70 75 80
 Phe Glu Lys Gly Val Phe Asp Glu Lys Gly Asn Phe Leu Val Pro Pro
 85 90 95
 Glu Lys Ser Ile Asn Lys Ile Gly His Ala Leu His Ala His Asp Pro
 100 105 110
 Val Phe Lys Ser Ile Thr His Ser Phe Lys Val Gln Thr Leu Ala Arg
 115 120 125
 Ser Leu Gly Leu Gln Met Pro Val Val Val Gln Ser Met Tyr Ile Phe
 130 135 140
 Lys Gln Pro His Phe Gly Gly Glu Val Ser Pro His Gln Asp Ala Ser
 145 150 155 160
 Phe Leu Tyr Thr Glu Pro Leu Gly Arg Val Leu Gly Val Trp Ile Ala
 165 170 175

Val Glu Asp Ala Thr Leu Glu Asn Gly Cys Leu Trp Phe Ile Pro Gly
 180 185 190
 Ser His Thr Ser Gly Val Ser Arg Arg Met Val Arg Ala Pro Val Gly
 195 200 205
 Ser Ala Pro Gly Thr Ser Phe Leu Gly Ser Glu Pro Ala Arg Asp Asn
 210 215 220
 Ser Leu Phe Val Pro Thr Pro Val Gln Arg Gly Ala Leu Val Leu Ile
 225 230 235 240
 His Gly Glu Val Val His Lys Ser Lys Gln Asn Leu Ser Asp Arg Ser
 245 250 255
 Arg Gln Ala Tyr Thr Phe His Leu Met Glu Ala Ser Gly Thr Thr Trp
 260 265 270
 Ser Pro Glu Asn Trp Leu Gln Pro Thr Ala Glu Leu Pro Phe Pro Gln
 275 280 285
 Leu Tyr Thr *
 290 291

<210> 1659
 <211> 67
 <212> PRT
 <213> Homo sapiens

<400> 1659
 Met Arg Asn Thr Phe Ala Glu Leu Lys Asn Ser Leu Glu Ala Leu Ser
 1 5 10 15
 Ser Arg Met Asp Gln Ala Glu Glu Arg Ile Gly Thr Gln Ala Gly Val
 20 25 30
 Gln Trp Arg Asp His Gly Ser Leu Gln Pro Gln Pro Pro Glu Phe Lys
 35 40 45
 Gln Cys Phe His Leu Ser Leu Pro Ser Ser Trp Asp Tyr Arg Ala Cys
 50 55 60
 Leu Ser *
 65 66

<210> 1660
 <211> 234
 <212> PRT
 <213> Homo sapiens

<400> 1660
 Met Gly Lys Ser Lys Ala Lys Pro Asn Gly Lys Lys Pro Ala Ala Glu
 1 5 10 15
 Glu Arg Lys Ala Tyr Leu Glu Pro Glu His Thr Lys Ala Arg Ile Thr
 20 25 30
 Asp Phe Gln Phe Lys Glu Leu Val Val Leu Pro Arg Glu Ile Asp Leu
 35 40 45
 Asn Glu Trp Leu Ala Ser Asn Thr Thr Thr Phe Phe His His Ile Asn
 50 55 60
 Leu Gln Tyr Ser Thr Ile Ser Glu Phe Cys Thr Gly Glu Thr Cys Gln
 65 70 75 80
 Thr Met Ala Val Cys Asn Thr Gln Tyr Tyr Trp Tyr Asp Glu Arg Gly
 85 90 95
 Lys Lys Val Lys Cys Thr Ala Pro Gln Tyr Val Asp Phe Val Met Ser
 100 105 110
 Ser Val Gln Lys Leu Val Thr Asp Glu Asp Val Phe Pro Thr Lys Tyr
 115 120 125
 Gly Arg Glu Phe Pro Ser Ser Phe Glu Ser Leu Val Arg Lys Ile Cys
 130 135 140

Arg	His	Leu	Phe	His	Val	Leu	Ala	His	Ile	Tyr	Trp	Ala	His	Phe	Lys
145					150					155					160
Glu	Thr	Leu	Ala	Leu	Glu	Leu	His	Gly	His	Leu	Asn	Thr	Leu	Tyr	Val
				165					170						175
His	Phe	Ile	Leu	Phe	Ala	Arg	Glu	Phe	Asn	Leu	Leu	Asp	Pro	Lys	Glu
			180					185					190		
Thr	Ala	Ile	Met	Asp	Asp	Leu	Thr	Glu	Val	Leu	Cys	Ser	Gly	Ala	Gly
		195					200					205			
Gly	Val	His	Ser	Gly	Gly	Ser	Gly	Asp	Gly	Ala	Gly	Ser	Gly	Gly	Pro
	210					215					220				
Gly	Ala	Gln	Asn	His	Val	Lys	Glu	Arg	*						
225					230			233							

<210> 1661
 <211> 277
 <212> PRT
 <213> Homo sapiens

<400> 1661

Met	Gln	Val	His	Ala	Leu	Arg	Glu	Asp	Phe	Arg	Glu	Lys	Asn	Ser	Ser
1				5					10					15	
Thr	Asn	Gln	His	Ile	Ile	Arg	Leu	Glu	Ser	Leu	Gln	Ala	Glu	Ile	Lys
			20					25					30		
Met	Leu	Ser	Asp	Arg	Lys	Arg	Glu	Leu	Glu	His	Arg	Leu	Ser	Ala	Thr
	35						40					45			
Leu	Glu	Glu	Asn	Asp	Leu	Leu	Gln	Gly	Thr	Val	Glu	Glu	Leu	Gln	Asp
	50					55					60				
Arg	Val	Leu	Ile	Leu	Glu	Arg	Gln	Gly	His	Asp	Lys	Asp	Leu	Gln	Leu
65					70					75					80
His	Gln	Ser	Gln	Leu	Glu	Leu	Gln	Glu	Val	Arg	Leu	Ser	Cys	Arg	Gln
			85					90					95		
Leu	Gln	Val	Lys	Val	Glu	Glu	Leu	Thr	Glu	Glu	Arg	Ser	Leu	Gln	Ser
		100						105					110		
Ser	Ala	Ala	Thr	Ser	Thr	Ser	Leu	Leu	Ser	Glu	Ile	Glu	Gln	Ser	Met
	115						120					125			
Glu	Ala	Glu	Glu	Leu	Glu	Gln	Glu	Arg	Glu	Gln	Val	Thr	Leu	Leu	Ser
	130					135					140				
Val	Glu	Met	Thr	Ala	Leu	Lys	Glu	Glu	Arg	Asp	Arg	Leu	Arg	Val	Thr
145					150					155					160
Ser	Glu	Asp	Lys	Glu	Pro	Lys	Glu	Gln	Leu	Gln	Lys	Ala	Ile	Arg	Asp
			165					170						175	
Arg	Asp	Glu	Ala	Ile	Ala	Lys	Lys	Asn	Ala	Val	Glu	Leu	Glu	Leu	Ala
		180						185					190		
Lys	Cys	Arg	Met	Asp	Met	Met	Ser	Leu	Asn	Ser	Gln	Leu	Leu	Asp	Ala
	195						200					205			
Ile	Gln	Gln	Lys	Leu	Asn	Leu	Ser	Gln	Gln	Leu	Glu	Ala	Trp	Gln	Asp
	210					215					220				
Asp	Met	His	Arg	Val	Ile	Asp	Arg	Gln	Leu	Met	Asp	Thr	His	Leu	Lys
225					230					235					240
Glu	Arg	Ser	Gln	Pro	Ala	Ala	Ala	Leu	Cys	Arg	Gly	His	Ser	Ala	Gly
			245					250						255	
Arg	Gly	Asp	Glu	Pro	Ser	Ile	Ala	Glu	Gly	Lys	Arg	Leu	Phe	Ser	Phe
		260						265					270		
Phe	Arg	Lys	Ile	*											
		275	276												

<210> 1662
 <211> 2264
 <212> PRT

<213> Homo sapiens

<400> 1662

Met	Ala	Val	Trp	Gln	Leu	Tyr	Tyr	Trp	Arg	Gly	Gly	Val	Thr	Val	Ser
1				5					10					15	
Val	Gly	Gly	Ser	Arg	Pro	Gly	Gln	Thr	Leu	Arg	Gly	Ser	Val	Gln	Asn
			20					25					30		
Lys	Leu	Asn	Pro	Arg	Pro	Gly	Lys	Val	Val	Ile	Tyr	Ser	Glu	Pro	Asp
		35					40					45			
Val	Ser	Glu	Lys	Cys	Ile	Glu	Val	Phe	Ser	Asp	Ile	Gln	Asp	Cys	Ser
	50					55					60				
Ser	Trp	Ser	Leu	Ser	Pro	Val	Ile	Leu	Ile	Lys	Val	Val	Arg	Gly	Cys
65					70					75					80
Trp	Ile	Leu	Tyr	Glu	Gln	Pro	Asn	Phe	Glu	Gly	His	Ser	Ile	Pro	Leu
				85					90					95	
Glu	Glu	Gly	Glu	Leu	Glu	Leu	Ser	Gly	Leu	Trp	Gly	Ile	Glu	Asp	Ile
			100					105					110		
Val	Glu	Arg	His	Glu	Glu	Ala	Glu	Ser	Asp	Lys	Pro	Val	Val	Ile	Gly
	115						120					125			
Ser	Ile	Arg	His	Val	Val	Gln	Asp	Tyr	Arg	Val	Ser	His	Ile	Asp	Leu
130						135					140				
Phe	Thr	Glu	Pro	Glu	Gly	Leu	Gly	Ile	Leu	Ser	Ser	Tyr	Phe	Asp	Asp
145					150					155					160
Thr	Glu	Glu	Met	Gln	Gly	Phe	Gly	Val	Met	Gln	Lys	Thr	Cys	Ser	Met
			165					170						175	
Lys	Val	His	Trp	Gly	Thr	Trp	Leu	Ile	Tyr	Glu	Glu	Pro	Gly	Phe	Gln
			180					185					190		
Gly	Val	Pro	Phe	Ile	Leu	Glu	Pro	Gly	Glu	Tyr	Pro	Asp	Leu	Ser	Phe
	195						200					205			
Trp	Asp	Thr	Glu	Ala	Ala	Tyr	Ile	Gly	Ser	Met	Arg	Pro	Leu	Lys	Met
	210					215					220				
Gly	Gly	Arg	Lys	Val	Glu	Phe	Pro	Thr	Asp	Pro	Lys	Ser	Arg	Ala	Gln
225					230					235					240
Pro	Pro	Glu	Asp	Asn	Arg	Arg	Lys	Pro	Val	Leu	Gly	Lys	Leu	Gly	Thr
			245						250					255	
Leu	Phe	Thr	Ala	Gly	Arg	Arg	Arg	Asn	Ser	Arg	Asn	Gly	Leu	Glu	Ser
			260					265					270		
Pro	Thr	Arg	Ser	Asn	Ala	Lys	Pro	Leu	Ser	Pro	Lys	Asp	Val	Val	Ala
	275						280					285			
Ser	Pro	Lys	Leu	Pro	Glu	Arg	Glu	Ser	Glu	Arg	Ser	Arg	Ser	Gln	Ser
	290					295					300				
Ser	Gln	Leu	Lys	Gln	Thr	Asp	Thr	Ser	Glu	Glu	Gly	Ser	Pro	Arg	Glu
305					310					315					320
Asn	Pro	Arg	Glu	Ala	Glu	Gly	Glu	Leu	Pro	Glu	Ser	Gly	Gly	Pro	Ala
			325						330					335	
Ala	Pro	Pro	Asp	Ala	Glu	Leu	Ser	Pro	Arg	Trp	Ser	Ser	Ser	Ala	Ala
			340					345					350		
Ala	Val	Ala	Val	Gln	Gln	Cys	His	Glu	Asn	Asp	Ser	Pro	Gln	Leu	Glu
	355						360						365		
Pro	Leu	Glu	Ala	Glu	Gly	Glu	Pro	Phe	Pro	Asp	Ala	Thr	Thr	Thr	Ala
	370					375					380				
Lys	Gln	Leu	His	Ser	Ser	Pro	Gly	Asn	Ser	Ser	Arg	Gln	Glu	Asn	Ala
385					390					395					400
Glu	Thr	Pro	Ala	Arg	Ser	Pro	Gly	Glu	Asp	Ala	Ser	Pro	Gly	Ala	Gly
			405						410					415	
His	Glu	Gln	Glu	Ala	Phe	Leu	Gly	Val	Arg	Gly	Ala	Pro	Gly	Ser	Pro
			420					425					430		
Thr	Gln	Glu	Arg	Pro	Ala	Gly	Gly	Leu	Gly	Glu	Ala	Pro	Asn	Ala	Ala
	435						440					445			
Pro	Ser	Val	Cys	Ala	Glu	Glu	Gly	Ser	Leu	Gly	Pro	Arg	Asn	Ala	Arg
	450					455					460				
Ser	Gln	Pro	Pro	Lys	Gly	Ala	Ser	Asp	Leu	Pro	Gly	Glu	Pro	Pro	Ala
465					470					475					480

3523

Asp Ser Gln Ser Pro Ala Glu Ser Ser Pro Gly Pro Ser Leu Ser Leu
995 1000 1005
Ser Ala Pro Ala Pro Gly Asp Val Pro Lys Asp Thr Cys Val Gln Ser
1010 1015 1020
Pro Ile Ser Ser Phe Pro Cys Thr Asp Leu Lys Val Ser Glu Asn His
1025 1030 1035 1040
Lys Gly Cys Val Leu Pro Val Ser Arg Gln Asn Asn Glu Lys Met Pro
1045 1050 1055
Leu Leu Glu Leu Gly Gly Glu Thr Thr Pro Pro Leu Ser Thr Glu Arg
1060 1065 1070
Ser Pro Glu Ala Val Gly Ser Glu Cys Pro Ser Arg Val Leu Val Gln
1075 1080 1085
Val Arg Ser Phe Val Leu Pro Val Glu Ser Thr Gln Asp Val Ser Ser
1090 1095 1100
Gln Val Ile Pro Glu Ser Ser Glu Val Arg Glu Val Gln Leu Pro Thr
1105 1110 1115 1120
Cys His Ser Asn Glu Pro Glu Val Val Ser Val Ala Ser Cys Ala Pro
1125 1130 1135
Pro Gln Glu Glu Val Leu Gly Asn Glu His Ser His Cys Thr Ala Glu
1140 1145 1150
Leu Ala Ala Lys Ser Gly Pro Gln Val Ile Pro Pro Ala Ser Glu Lys
1155 1160 1165
Thr Leu Pro Ile Gln Ala Gln Ser Gln Gly Ser Arg Thr Pro Leu Met
1170 1175 1180
Ala Glu Ser Ser Pro Thr Asn Ser Pro Ser Ser Gly Asn His Leu Ala
1185 1190 1195 1200
Thr Pro Gln Arg Pro Asp Gln Thr Val Thr Asn Gly Gln Asp Ser Pro
1205 1210 1215
Ala Ser Leu Leu Asn Ile Ser Ala Gly Ser Asp Asp Ser Val Phe Asp
1220 1225 1230
Ser Ser Ser Asp Met Glu Lys Phe Thr Glu Ile Ile Lys Gln Met Asp
1235 1240 1245
Ser Ala Val Cys Met Pro Met Lys Arg Lys Lys Ala Arg Met Pro Asn
1250 1255 1260
Ser Pro Ala Pro His Phe Ala Met Pro Pro Ile His Glu Asp His Leu
1265 1270 1275 1280
Glu Lys Val Phe Asp Pro Lys Val Phe Thr Phe Gly Leu Gly Lys Lys
1285 1290 1295
Lys Glu Ser Gln Pro Glu Met Ser Pro Ala Leu His Leu Met Gln Asn
1300 1305 1310
Leu Asp Thr Lys Ser Lys Leu Arg Pro Lys Arg Ala Ser Ala Glu Gln
1315 1320 1325
Ser Val Leu Phe Lys Ser Leu His Thr Asn Thr Asn Gly Asn Ser Glu
1330 1335 1340
Pro Leu Val Met Pro Glu Ile Asn Asp Lys Glu Asn Arg Asp Val Thr
1345 1350 1355 1360
Asn Gly Gly Ile Lys Arg Ser Arg Leu Glu Lys Ser Ala Leu Phe Ser
1365 1370 1375
Ser Leu Leu Ser Ser Leu Pro Gln Asp Lys Ile Phe Ser Pro Ser Val
1380 1385 1390
Thr Ser Val Asn Thr Met Thr Thr Ala Phe Ser Thr Ser Gln Asn Gly
1395 1400 1405
Ser Leu Ser Gln Ser Ser Val Ser Gln Pro Thr Thr Glu Gly Ala Pro
1410 1415 1420
Pro Cys Gly Leu Asn Lys Glu Gln Ser Asn Leu Leu Pro Asp Asn Ser
1425 1430 1435 1440
Leu Lys Val Phe Asn Phe Asn Ser Ser Ser Thr Ser His Ser Ser Leu
1445 1450 1455
Lys Ser Pro Ser His Met Glu Lys Tyr Pro Gln Lys Glu Lys Thr Lys
1460 1465 1470
Glu Asp Leu Asp Ser Arg Ser Asn Leu His Leu Pro Glu Thr Lys Phe
1475 1480 1485
Ser Glu Leu Ser Lys Leu Lys Asn Asp Asp Met Glu Lys Ala Asn His
1490 1495 1500

Ile Glu Ser Val Ile Lys Ser Asn Leu Pro Asn Cys Ala Asn Ser Asp
1505 1510 1515 1520
Thr Asp Phe Met Gly Leu Phe Lys Ser Ser Arg Tyr Asp Pro Ser Ile
1525 1530 1535
Ser Phe Ser Gly Met Ser Leu Ser Asp Thr Met Thr Leu Arg Gly Ser
1540 1545 1550
Val Gln Asn Lys Leu Asn Pro Arg Pro Gly Lys Val Val Ile Tyr Ser
1555 1560 1565
Glu Pro Asp Val Ser Glu Lys Cys Ile Glu Val Phe Ser Asp Ile Gln
1570 1575 1580
Asp Cys Ser Ser Trp Ser Leu Ser Pro Val Ile Leu Ile Lys Val Val
1585 1590 1595 1600
Arg Gly Cys Trp Ile Leu Tyr Glu Gln Pro Asn Phe Glu Gly His Ser
1605 1610 1615
Ile Pro Leu Glu Glu Gly Glu Leu Glu Leu Ser Gly Leu Trp Gly Ile
1620 1625 1630
Glu Asp Ile Leu Glu Arg His Glu Glu Ala Glu Ser Asp Lys Pro Val
1635 1640 1645
Val Ile Gly Ser Ile Arg His Val Val Gln Asp Tyr Arg Val Ser His
1650 1655 1660
Ile Asp Leu Phe Thr Glu Pro Glu Gly Leu Gly Ile Leu Ser Ser Tyr
1665 1670 1675 1680
Phe Asp Asp Thr Glu Glu Met Gln Gly Phe Gly Val Met Gln Lys Thr
1685 1690 1695
Cys Ser Met Lys Val His Trp Gly Thr Trp Leu Ile Tyr Glu Glu Pro
1700 1705 1710
Gly Phe Gln Gly Val Pro Phe Ile Leu Glu Pro Gly Glu Tyr Pro Asp
1715 1720 1725
Leu Ser Phe Trp Asp Thr Glu Ala Ala Tyr Ile Gly Ser Met Arg Pro
1730 1735 1740
Leu Lys Met Gly Gly Arg Lys Val Glu Phe Pro Thr Asp Pro Lys Val
1745 1750 1755 1760
Val Val Tyr Glu Lys Pro Phe Phe Glu Gly Lys Cys Val Glu Leu Glu
1765 1770 1775
Thr Gly Met Cys Ser Phe Val Met Glu Gly Gly Glu Thr Glu Glu Ala
1780 1785 1790
Thr Gly Asp Asp His Leu Pro Phe Thr Ser Val Gly Ser Met Lys Val
1795 1800 1805
Leu Arg Gly Ile Trp Val Ala Tyr Glu Lys Pro Gly Phe Thr Gly His
1810 1815 1820
Gln Tyr Leu Leu Glu Glu Gly Glu Tyr Arg Asp Trp Lys Ala Trp Gly
1825 1830 1835 1840
Gly Tyr Asn Gly Glu Leu Gln Ser Leu Arg Pro Ile Leu Gly Asp Phe
1845 1850 1855
Ser Asn Ala His Met Ile Met Tyr Ser Glu Lys Asn Phe Gly Ser Lys
1860 1865 1870
Gly Ser Ser Ile Asp Val Leu Gly Ile Val Ala Asn Leu Lys Glu Thr
1875 1880 1885
Gly Tyr Gly Val Lys Thr Gln Ser Ile Asn Val Leu Ser Gly Val Trp
1890 1895 1900
Val Ala Tyr Glu Asn Pro Asp Phe Thr Gly Glu Gln Tyr Ile Leu Asp
1905 1910 1915 1920
Lys Gly Phe Tyr Thr Ser Phe Glu Asp Trp Gly Gly Lys Asn Tyr Lys
1925 1930 1935
Ile Ser Ser Val Gln Pro Ile Cys Leu Asp Ser Phe Thr Gly Pro Arg
1940 1945 1950
Arg Arg Asn Gln Ile His Leu Phe Ser Glu Pro Gln Phe Gln Gly His
1955 1960 1965
Ser Gln Ser Phe Glu Glu Thr Thr Ser Gln Ile Asp Asp Ser Phe Ser
1970 1975 1980
Thr Lys Ser Cys Arg Val Ser Gly Gly Ser Trp Val Val Tyr Asp Gly
1985 1990 1995 2000
Glu Asn Phe Thr Gly Asn Gln Tyr Val Leu Glu Glu Gly His Tyr Pro
2005 2010 2015

Cys Leu Ser Ala Met Gly Cys Pro Pro Gly Ala Thr Phe Lys Ser Leu
 2020 2025 2030
 Arg Phe Ile Asp Val Glu Phe Ser Glu Pro Thr Ile Ile Leu Phe Glu
 2035 2040 2045
 Arg Glu Asp Phe Lys Gly Lys Lys Ile Glu Leu Asn Ala Glu Thr Val
 2050 2055 2060
 Asn Leu Arg Ser Leu Gly Phe Asn Thr Gln Ile Arg Ser Val Gln Val
 2065 2070 2075 2080
 Ile Gly Gly Ile Trp Val Thr Tyr Glu Tyr Gly Ser Tyr Arg Gly Arg
 2085 2090 2095
 Gln Phe Leu Leu Ser Pro Ala Glu Val Pro Asn Trp Tyr Glu Phe Ser
 2100 2105 2110
 Gly Cys Arg Gln Ile Gly Ser Leu Arg Pro Phe Val Gln Lys Arg Ile
 2115 2120 2125
 Tyr Phe Arg Leu Arg Asn Lys Ala Thr Gly Leu Phe Met Ser Thr Asn
 2130 2135 2140
 Gly Asn Leu Glu Asp Leu Lys Leu Leu Arg Ile Gln Val Met Glu Asp
 2145 2150 2155 2160
 Val Gly Ala Asp Asp Gln Ile Trp Ile Tyr Gln Glu Gly Cys Ile Lys
 2165 2170 2175
 Cys Arg Ile Ala Glu Asp Cys Cys Leu Thr Ile Val Gly Ser Leu Val
 2180 2185 2190
 Thr Ser Gly Ser Lys Leu Gly Leu Ala Leu Asp Gln Asn Ala Asp Ser
 2195 2200 2205
 Gln Phe Trp Ser Leu Lys Ser Asp Gly Arg Ile Tyr Ser Lys Leu Lys
 2210 2215 2220
 Pro Asn Leu Val Leu Asp Ile Lys Gly Gly Thr Gln Tyr Asp Gln Asn
 2225 2230 2235 2240
 His Ile Ile Leu Asn Thr Val Ser Lys Glu Lys Phe Thr Gln Val Trp
 2245 2250 2255
 Glu Ala Met Val Leu Tyr Thr *
 2260 2263

<210> 1663
 <211> 418
 <212> PRT
 <213> Homo sapiens

<400> 1663
 Met Gly Arg Arg Arg Ala Pro Glu Leu Tyr Arg Ala Pro Phe Pro Leu
 1 5 10 15
 Tyr Ala Leu Gln Val Asp Pro Ser Thr Gly Leu Leu Ile Ala Ala Gly
 20 25 30
 Gly Gly Gly Ala Ala Lys Thr Gly Ile Lys Asn Gly Val His Phe Leu
 35 40 45
 Gln Leu Glu Leu Ile Asn Gly Arg Leu Ser Ala Ser Leu Leu His Ser
 50 55 60
 His Asp Thr Glu Thr Arg Ala Thr Met Asn Leu Ala Leu Ala Gly Asp
 65 70 75 80
 Ile Leu Ala Ala Gly Gln Asp Ala His Cys Gln Leu Leu Arg Phe Gln
 85 90 95
 Ala His Gln Gln Gln Gly Asn Lys Ala Glu Lys Ala Gly Ser Lys Glu
 100 105 110
 Gln Gly Pro Arg Gln Arg Lys Gly Ala Ala Pro Ala Glu Lys Lys Cys
 115 120 125
 Gly Ala Glu Thr Gln His Glu Gly Leu Glu Leu Arg Val Glu Asn Leu
 130 135 140
 Gln Ala Val Gln Thr Asp Phe Ser Ser Asp Pro Leu Gln Lys Val Val
 145 150 155 160
 Cys Phe Asn His Asp Asn Thr Leu Leu Ala Thr Gly Gly Thr Asp Gly
 165 170 175

Tyr Val Arg Val Trp Lys Val Pro Ser Leu Glu Lys Val Leu Glu Phe
 180 185 190
 Lys Ala His Glu Gly Glu Ile Glu Asp Leu Ala Leu Gly Pro Asp Gly
 195 200 205
 Lys Leu Val Thr Val Gly Arg Asp Leu Lys Ala Ser Val Trp Gln Lys
 210 215 220
 Asp Gln Leu Val Thr Gln Leu His Trp Gln Glu Asn Gly Pro Thr Phe
 225 230 235 240
 Ser Ser Thr Pro Tyr Arg Tyr Gln Ala Cys Arg Phe Gly Gln Val Pro
 245 250 255
 Asp Gln Pro Ala Gly Leu Arg Leu Phe Thr Val Gln Ile Pro His Lys
 260 265 270
 Arg Leu Arg Gln Pro Pro Pro Cys Tyr Leu Thr Ala Trp Asp Gly Ser
 275 280 285
 Asn Phe Leu Pro Leu Arg Thr Lys Ser Cys Gly His Glu Val Val Ser
 290 295 300
 Cys Leu Asp Val Ser Glu Ser Gly Thr Phe Leu Gly Leu Gly Thr Val
 305 310 315 320
 Thr Gly Ser Val Ala Ile Tyr Ile Ala Phe Ser Leu Gln Cys Leu Tyr
 325 330 335
 Tyr Val Arg Glu Ala His Gly Ile Val Val Thr Asp Val Ala Phe Leu
 340 345 350
 Pro Glu Lys Gly Arg Gly Pro Glu Leu Leu Gly Ser His Glu Thr Ala
 355 360 365
 Leu Phe Ser Val Ala Val Asp Ser Arg Cys Gln Leu His Leu Leu Pro
 370 375 380
 Ser Arg Arg Ser Val Pro Val Trp Leu Leu Leu Leu Leu Cys Val Gly
 385 390 395 400
 Leu Ile Ile Val Thr Ile Leu Leu Leu Gln Ser Ala Phe Pro Gly Phe
 405 410 415
 Leu *
 417

<210> 1664
 <211> 251
 <212> PRT
 <213> Homo sapiens

<400> 1664
 Met Thr His Cys Cys Ser Pro Cys Cys Gln Pro Thr Cys Cys Arg Thr
 1 5 10 15
 Thr Cys Cys Arg Thr Thr Cys Trp Lys Pro Thr Thr Val Thr Thr Cys
 20 25 30
 Ser Ser Thr Pro Cys Cys Gln Pro Ser Cys Cys Val Pro Ser Cys Cys
 35 40 45
 Gln Pro Cys Cys His Pro Thr Cys Cys Gln Asn Thr Cys Cys Arg Thr
 50 55 60
 Thr Cys Cys Gln Pro Thr Cys Val Ala Ser Cys Cys Gln Pro Ser Cys
 65 70 75 80
 Cys Ser Thr Pro Cys Cys Gln Pro Thr Cys Cys Gly Ser Ser Cys Cys
 85 90 95
 Gly Gln Thr Ser Cys Gly Ser Ser Cys Cys Gln Pro Ile Cys Gly Ser
 100 105 110
 Ser Cys Cys Gln Pro Cys Cys His Pro Thr Cys Tyr Gln Thr Ile Cys
 115 120 125
 Phe Arg Thr Thr Cys Cys Gln Pro Thr Cys Cys Gln Pro Thr Cys Cys
 130 135 140
 Arg Asn Thr Ser Cys Gln Pro Thr Cys Cys Gly Ser Ser Cys Cys Gln
 145 150 155 160
 Pro Cys Cys His Pro Thr Cys Cys Gln Thr Ile Cys Arg Ser Thr Cys
 165 170 175

Cys	Gln	Pro	Ser	Cys	Val	Thr	Arg	Cys	Cys	Ser	Thr	Pro	Cys	Cys	Gln
			180					185					190		
Pro	Thr	Cys	Gly	Gly	Ser	Ser	Cys	Cys	Ser	Gln	Thr	Cys	Asn	Glu	Ser
		195					200					205			
Ser	Tyr	Cys	Leu	Pro	Cys	Cys	Arg	Pro	Thr	Cys	Cys	Gln	Thr	Thr	Cys
	210					215					220				
Tyr	Arg	Thr	Thr	Cys	Cys	Arg	Pro	Ser	Cys	Cys	Cys	Ser	Pro	Cys	Cys
225					230					235					240
Val	Ser	Ser	Cys	Cys	Gln	Pro	Ser	Cys	Cys	*					
			245						250						

<210> 1665
 <211> 737
 <212> PRT
 <213> Homo sapiens

<400> 1665

Met	Arg	Glu	Leu	Lys	Arg	Thr	Leu	Asp	Ala	Lys	Gly	His	Gly	Val	Leu
1				5					10					15	
Glu	Met	Pro	Ser	Gly	Thr	Gly	Lys	Thr	Val	Ser	Leu	Leu	Ala	Leu	Ile
			20					25					30		
Met	Ala	Tyr	Gln	Arg	Ala	Tyr	Pro	Leu	Glu	Val	Thr	Lys	Leu	Ile	Tyr
		35					40					45			
Cys	Ser	Arg	Thr	Val	Pro	Glu	Ile	Glu	Lys	Val	Ile	Glu	Glu	Leu	Arg
	50					55					60				
Lys	Leu	Leu	Asn	Phe	Tyr	Glu	Lys	Gln	Glu	Gly	Glu	Lys	Leu	Pro	Phe
	65				70					75					80
Leu	Gly	Leu	Ala	Leu	Ser	Ser	Arg	Lys	Asn	Leu	Cys	Ile	His	Pro	Glu
				85					90					95	
Val	Thr	Pro	Leu	Arg	Phe	Gly	Lys	Asp	Val	Asp	Gly	Lys	Cys	His	Ser
			100					105					110		
Leu	Thr	Ala	Ser	Tyr	Val	Arg	Ala	Gln	Tyr	Gln	His	Asp	Thr	Ser	Leu
		115					120					125			
Pro	His	Cys	Arg	Phe	Tyr	Glu	Glu	Phe	Asp	Ala	His	Gly	Arg	Glu	Val
	130					135						140			
Pro	Leu	Pro	Ala	Gly	Ile	Tyr	Asn	Leu	Asp	Asp	Leu	Lys	Ala	Leu	Gly
145					150					155					160
Arg	Arg	Gln	Gly	Trp	Cys	Pro	Tyr	Phe	Leu	Ala	Arg	Tyr	Ser	Ile	Leu
				165					170					175	
His	Ala	Asn	Val	Val	Val	Tyr	Ser	Tyr	His	Tyr	Leu	Leu	Asp	Pro	Lys
			180					185					190		
Ile	Ala	Asp	Leu	Val	Ser	Lys	Glu	Leu	Ala	Arg	Lys	Ala	Val	Val	Val
		195					200					205			
Phe	Asp	Glu	Ala	His	Asn	Ile	Asp	Asn	Val	Cys	Ile	Asp	Ser	Met	Ser
	210					215					220				
Val	Asn	Leu	Thr	Arg	Arg	Thr	Leu	Asp	Arg	Cys	Gln	Gly	Asn	Leu	Glu
225					230					235					240
Thr	Leu	Gln	Lys	Thr	Val	Leu	Arg	Ile	Lys	Glu	Thr	Asp	Glu	Gln	Arg
				245					250					255	
Leu	Arg	Asp	Glu	Tyr	Arg	Arg	Leu	Val	Glu	Gly	Leu	Arg	Glu	Ala	Ser
			260					265					270		
Ala	Ala	Arg	Glu	Thr	Asp	Ala	His	Leu	Ala	Asn	Pro	Val	Leu	Pro	Asp
		275					280					285			
Glu	Val	Leu	Gln	Glu	Ala	Val	Pro	Gly	Ser	Ile	Arg	Thr	Ala	Glu	His
	290					295					300				
Phe	Leu	Gly	Phe	Leu	Arg	Arg	Leu	Leu	Glu	Tyr	Val	Lys	Trp	Arg	Leu
305					310					315					320
Arg	Val	Gln	His	Val	Val	Gln	Glu	Ser	Pro	Pro	Ala	Phe	Leu	Ser	Gly
				325					330					335	
Leu	Ala	Gln	Arg	Val	Cys	Ile	Gln	Arg	Lys	Pro	Leu	Arg	Phe	Cys	Ala
			340					345					350		

Glu Arg Leu Arg Ser Leu Leu His Thr Leu Glu Ile Thr Asp Leu Ala
 355 360 365
 Asp Phe Ser Pro Leu Thr Leu Leu Ala Asn Phe Ala Thr Leu Val Ser
 370 375 380
 Thr Tyr Ala Lys Gly Phe Thr Ile Ile Ile Glu Pro Phe Asp Asp Arg
 385 390 395 400
 Thr Pro Thr Ile Ala Asn Pro Ile Leu His Phe Ser Cys Met Asp Ala
 405 410 415
 Ser Leu Ala Ile Lys Pro Val Phe Glu Arg Phe Gln Ser Val Ile Ile
 420 425 430
 Thr Ser Gly Thr Leu Ser Pro Leu Asp Ile Tyr Pro Lys Ile Leu Asp
 435 440 445
 Phe His Pro Val Thr Met Ala Thr Phe Thr Met Thr Leu Ala Arg Val
 450 455 460
 Cys Leu Cys Pro Met Ile Ile Gly Arg Gly Asn Asp Gln Val Ala Ile
 465 470 475 480
 Ser Ser Lys Phe Glu Thr Arg Glu Asp Ile Ala Val Ile Arg Asn Tyr
 485 490 495
 Gly Asn Leu Leu Leu Glu Met Ser Ala Val Val Pro Asp Gly Ile Val
 500 505 510
 Ala Phe Phe Thr Ser Tyr Gln Tyr Met Glu Ser Thr Val Ala Ser Trp
 515 520 525
 Tyr Glu Gln Gly Ile Leu Glu Asn Ile Gln Arg Asn Lys Leu Leu Phe
 530 535 540
 Ile Glu Thr Gln Asp Gly Ala Glu Thr Ser Val Ala Leu Glu Lys Tyr
 545 550 555 560
 Gln Glu Ala Cys Glu Asn Gly Arg Gly Ala Ile Leu Leu Ser Val Ala
 565 570 575
 Arg Gly Lys Val Ser Glu Gly Ile Asp Phe Val His His Tyr Gly Arg
 580 585 590
 Ala Val Ile Met Phe Gly Val Pro Tyr Val Tyr Thr Gln Ser Arg Ile
 595 600 605
 Leu Lys Ala Arg Leu Glu Tyr Leu Arg Asp Gln Phe Gln Ile Arg Glu
 610 615 620
 Asn Asp Phe Leu Thr Phe Asp Ala Met Arg His Ala Ala Gln Cys Val
 625 630 635 640
 Gly Arg Ala Ile Arg Gly Lys Thr Asp Tyr Gly Leu Met Val Phe Ala
 645 650 655
 Asp Lys Arg Phe Ala Arg Gly Asp Lys Arg Gly Lys Leu Pro Arg Trp
 660 665 670
 Ile Gln Glu His Leu Thr Asp Ala Asn Leu Asn Leu Thr Val Asp Glu
 675 680 685
 Gly Val Gln Val Ala Lys Tyr Phe Leu Arg Gln Met Ala Gln Pro Phe
 690 695 700
 His Arg Glu Asp Gln Leu Gly Leu Ser Leu Leu Ser Leu Glu Gln Leu
 705 710 715 720
 Glu Ser Glu Glu Thr Leu Lys Arg Ile Glu Gln Ile Ala Gln Gln Leu
 725 730 735 736

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<210> 1666
 <211> 73
 <212> PRT
 <213> Homo sapiens

<400> 1666
 Met Ser Ser Lys Thr Ala Ser Thr Asn Asn Ile Ala Gln Ala Arg Arg
 1 5 10 15
 Thr Val Gln Gln Leu Arg Leu Glu Ala Ser Ile Glu Arg Ile Lys Val
 20 25 30

Ser Lys Ala Ser Ala Asp Leu Met Ser Tyr Cys Glu Glu His Ala Arg
 35 40 45
 Ser Asp Pro Leu Leu Ile Gly Ile Pro Thr Ser Glu Asn Pro Phe Lys
 50 55 60
 Asp Lys Lys Thr Cys Ile Ile Leu *
 65 70 72

<210> 1667
 <211> 121
 <212> PRT
 <213> Homo sapiens

<400> 1667
 Met Gly Arg Arg Lys Ser Lys Arg Lys Pro Pro Pro Lys Lys Lys Met
 1 5 10 15
 Thr Gly Thr Leu Glu Thr Gln Phe Thr Cys Pro Phe Cys Asn His Glu
 20 25 30
 Lys Ser Cys Asp Val Lys Met Asp Arg Ala Arg Asn Thr Gly Val Ile
 35 40 45
 Ser Cys Thr Val Cys Leu Glu Glu Phe Gln Thr Pro Ile Thr Cys Ile
 50 55 60
 Leu Gly Asn Leu Gly Phe Phe Gln Arg Val Gly Arg Gly Leu Glu Ser
 65 70 75 80
 Gly Pro Cys Ser Ser Gly Pro Leu Cys Ala Leu Val Gln Gly Gln Ser
 85 90 95
 Arg Pro Glu Glu Gln Val Pro Pro Ser Asp Phe Cys Gly Val Arg Arg
 100 105 110
 Cys Arg Ala Gly Phe Gln Cys Gln *
 115 120

<210> 1668
 <211> 62
 <212> PRT
 <213> Homo sapiens

<400> 1668
 Met Lys Arg Phe Leu Phe Leu Leu Leu Thr Ile Ser Leu Leu Val Met
 1 5 10 15
 Val Gln Ile Gln Thr Gly Leu Ser Gly Gln Asn Asp Thr Ser Gln Thr
 20 25 30
 Ser Ser Pro Ser Ala Ser Ser Ser Met Ser Gly Gly Ile Phe Leu Phe
 35 40 45
 Phe Val Ala Asn Ala Ile Ile His Leu Phe Cys Phe Ser *
 50 55 60 61

<210> 1669
 <211> 371
 <212> PRT
 <213> Homo sapiens

<400> 1669
 Met Glu Ile Leu Met Thr Val Ser Lys Phe Ala Ser Ile Cys Thr Met
 1 5 10 15
 Gly Ala Asn Ala Ser Ala Leu Glu Lys Glu Ile Gly Pro Glu Gln Phe
 20 25 30

Pro Val Asn Glu His Tyr Phe Gly Leu Val Asn Phe Gly Asn Thr Cys
 35 40 45
 Tyr Cys Asn Ser Val Leu Gln Ala Leu Tyr Phe Cys Arg Pro Phe Arg
 50 55 60
 Glu Lys Val Leu Ala Tyr Lys Ser Gln Pro Arg Lys Lys Glu Ser Leu
 65 70 75 80
 Leu Thr Cys Leu Ala Asp Leu Phe His Ser Ile Ala Thr Gln Lys Lys
 85 90 95
 Lys Val Gly Val Ile Pro Pro Lys Lys Phe Ile Thr Arg Leu Arg Lys
 100 105 110
 Glu Asn Glu Leu Phe Asp Asn Tyr Met Gln Gln Asp Ala His Glu Phe
 115 120 125
 Leu Asn Tyr Leu Leu Asn Thr Ile Ala Asp Ile Leu Gln Glu Glu Arg
 130 135 140
 Lys Gln Glu Lys Gln Asn Gly Arg Leu Pro Asn Gly Asn Ile Asp Asn
 145 150 155 160
 Glu Asn Asn Asn Ser Thr Pro Asp Pro Thr Trp Val His Glu Ile Phe
 165 170 175
 Gln Gly Thr Leu Thr Asn Glu Thr Arg Cys Leu Thr Cys Glu Thr Ile
 180 185 190
 Ser Ser Lys Asp Glu Asp Phe Leu Asp Leu Ser Val Asp Val Glu Gln
 195 200 205
 Asn Thr Ser Ile Thr His Cys Leu Arg Gly Phe Ser Asn Thr Glu Thr
 210 215 220
 Leu Cys Ser Glu Tyr Lys Tyr Tyr Cys Glu Glu Cys Arg Ser Lys Gln
 225 230 235 240
 Glu Ala His Lys Arg Met Lys Val Lys Lys Leu Pro Met Ile Leu Ala
 245 250 255
 Leu His Leu Lys Arg Phe Lys Tyr Met Asp Gln Leu His Arg Tyr Thr
 260 265 270
 Lys Leu Ser Tyr Arg Val Val Phe Pro Leu Glu Leu Arg Leu Phe Asn
 275 280 285
 Thr Ser Gly Asp Ala Thr Asn Pro Asp Arg Met Tyr Asp Leu Val Ala
 290 295 300
 Val Val Val His Cys Gly Ser Gly Pro Asn Arg Gly His Tyr Ile Ala
 305 310 315 320
 Ile Val Lys Ser His Asp Phe Trp Leu Leu Phe Asp Asp Asp Ile Val
 325 330 335
 Glu Lys Ile Asp Ala Gln Ala Ile Glu Glu Phe Tyr Gly Leu Thr Ser
 340 345 350
 Asp Ile Ser Lys Asn Ser Glu Ser Gly Tyr Ile Leu Phe Tyr Gln Ser
 355 360 365
 Arg Asp *
 370

<210> 1670

<211> 185

<212> PRT

<213> Homo sapiens

<400> 1670

Met Lys Pro Asp Glu Thr Pro Met Phe Asp Pro Asn Leu Leu Lys Glu
 1 5 10 15
 Val Asp Trp Ser Gln Asn Thr Ala Thr Phe Ser Pro Ala Ile Ser Pro
 20 25 30
 Thr His Pro Gly Glu Gly Leu Val Leu Arg Pro Leu Cys Thr Ala Asp
 35 40 45
 Leu Asn Arg Gly Phe Phe Lys Val Leu Gly Gln Leu Thr Glu Thr Gly
 50 55 60
 Val Val Ser Pro Glu Gln Phe Met Lys Ser Phe Glu His Met Lys Lys
 65 70 75 80

Ser	Gly	Asp	Tyr	Tyr	Val	Thr	Val	Val	Glu	Asp	Val	Thr	Leu	Gly	Gln
				85					90					95	
Ile	Val	Ala	Thr	Ala	Thr	Leu	Ile	Ile	Glu	His	Lys	Phe	Ile	His	Ser
			100					105					110		
Cys	Ala	Lys	Arg	Gly	Arg	Val	Glu	Asp	Val	Val	Ala	Ser	Asp	Glu	Cys
		115					120					125			
Arg	Gly	Lys	Gln	Leu	Gly	Asn	Leu	Leu	Leu	Ser	Thr	Leu	Thr	Leu	Leu
	130					135					140				
Ser	Lys	Lys	Leu	Asn	Cys	Tyr	Lys	Ile	Thr	Leu	Glu	Cys	Leu	Pro	Gln
145					150					155				160	
Asn	Val	Gly	Phe	Tyr	Lys	Lys	Phe	Gly	Tyr	Thr	Val	Ser	Glu	Glu	Asn
				165					170					175	
Tyr	Met	Cys	Arg	Arg	Phe	Leu	Lys	*							
			180				184								

<210> 1671

<211> 360

<212> PRT

<213> Homo sapiens

<400> 1671

Met	Lys	Ser	Pro	Phe	Tyr	Arg	Cys	Gln	Asn	Thr	Thr	Ser	Val	Glu	Lys
1				5					10					15	
Gly	Asn	Ser	Ala	Val	Met	Gly	Gly	Val	Leu	Phe	Ser	Thr	Gly	Leu	Leu
			20					25					30		
Gly	Asn	Leu	Leu	Ala	Leu	Gly	Leu	Leu	Ala	Arg	Ser	Gly	Leu	Gly	Trp
		35					40					45			
Cys	Ser	Arg	Arg	Pro	Leu	Arg	Pro	Leu	Pro	Ser	Val	Phe	Tyr	Met	Leu
	50					55					60				
Val	Cys	Gly	Leu	Thr	Val	Thr	Asp	Leu	Leu	Gly	Lys	Cys	Leu	Leu	Ser
65					70					75				80	
Pro	Val	Val	Leu	Ala	Ala	Tyr	Ala	Gln	Asn	Arg	Ser	Leu	Arg	Val	Leu
				85					90					95	
Ala	Pro	Ala	Leu	Asp	Asn	Ser	Leu	Cys	Gln	Ala	Phe	Ala	Phe	Phe	Met
			100					105					110		
Ser	Phe	Phe	Gly	Leu	Ser	Ser	Thr	Leu	Gln	Leu	Leu	Ala	Met	Ala	Leu
	115						120					125			
Glu	Cys	Trp	Leu	Ser	Leu	Gly	His	Pro	Phe	Phe	Tyr	Arg	Arg	His	Ile
	130					135					140				
Thr	Leu	Arg	Leu	Gly	Ala	Leu	Val	Ala	Pro	Val	Val	Ser	Ala	Phe	Ser
145					150						155				160
Leu	Ala	Phe	Cys	Ala	Leu	Pro	Phe	Met	Gly	Phe	Gly	Lys	Phe	Val	Gln
			165					170						175	
Tyr	Cys	Pro	Gly	Thr	Trp	Cys	Phe	Ile	Gln	Met	Val	His	Glu	Glu	Gly
			180					185					190		
Ser	Leu	Ser	Val	Leu	Gly	Tyr	Ser	Val	Leu	Tyr	Ser	Ser	Leu	Met	Ala
	195						200					205			
Leu	Leu	Val	Leu	Ala	Thr	Val	Leu	Cys	Asn	Leu	Gly	Ala	Met	Arg	Asn
	210					215					220				
Leu	Tyr	Ala	Met	His	Arg	Arg	Leu	Gln	Arg	His	Pro	Arg	Ser	Cys	Thr
225					230					235				240	
Arg	Asp	Cys	Ala	Glu	Pro	Arg	Ala	Asp	Gly	Arg	Glu	Ala	Ser	Pro	Gln
			245					250						255	
Pro	Leu	Glu	Glu	Leu	Asp	His	Leu	Leu	Leu	Leu	Ala	Leu	Met	Thr	Val
		260					265						270		
Leu	Phe	Thr	Met	Cys	Ser	Leu	Pro	Val	Ile	Tyr	Arg	Ala	Tyr	Tyr	Gly
	275						280					285			
Ala	Phe	Lys	Asp	Val	Lys	Glu	Lys	Asn	Arg	Thr	Ser	Glu	Glu	Ala	Glu
	290					295					300				
Asp	Leu	Arg	Ala	Leu	Arg	Phe	Leu	Ser	Val	Ile	Ser	Ile	Val	Asp	Pro
305					310					315					320


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<210> 1672
<211> 242
<212> PRT
<213> Homo sapiens
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<210> 1673
<211> 399
<212> PRT
<213> Homo sapiens
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      <400> 1673
Met  Leu  Gly  Arg  Ser  Gly  Tyr  Arg  Ala  Leu  Pro  Leu  Gly  Asp  Phe  Asp
 1          5          10          15
Arg  Phe  Gln  Gln  Ser  Ser  Phe  Gly  Phe  Leu  Gly  Ser  Gln  Lys  Gly  Cys
          20          25          30
Leu  Ser  Pro  Glu  Arg  Gly  Gly  Val  Gly  Thr  Gly  Ala  Asp  Val  Pro  Gln
          35          40          45

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Ser	Trp	Pro	Ser	Cys	Leu	Cys	His	Gly	Leu	Ile	Ser	Phe	Leu	Gly	Phe
50						55					60				
Leu	Leu	Leu	Leu	Val	Thr	Phe	Pro	Ile	Ser	Gly	Trp	Phe	Ala	Leu	Lys
65					70					75					80
Ile	Val	Pro	Thr	Tyr	Glu	Arg	Met	Ile	Val	Phe	Arg	Leu	Gly	Arg	Ile
				85					90						95
Arg	Thr	Pro	Gln	Gly	Pro	Gly	Met	Val	Leu	Leu	Leu	Pro	Phe	Ile	Asp
			100					105						110	
Ser	Phe	Gln	Arg	Val	Asp	Leu	Arg	Thr	Arg	Ala	Phe	Asn	Val	Pro	Pro
		115					120					125			
Cys	Lys	Leu	Ala	Ser	Lys	Asp	Gly	Ala	Val	Leu	Ser	Val	Gly	Ala	Asp
	130					135						140			
Val	Gln	Phe	Arg	Ile	Trp	Asp	Pro	Val	Leu	Ser	Val	Met	Thr	Val	Lys
145					150					155					160
Asp	Leu	Asn	Thr	Ala	Thr	Arg	Met	Thr	Ala	Gln	Asn	Ala	Met	Thr	Lys
				165					170						175
Ala	Leu	Leu	Lys	Arg	Pro	Leu	Arg	Glu	Ile	Gln	Met	Glu	Lys	Leu	Lys
			180					185						190	
Ile	Ser	Asp	Gln	Leu	Leu	Leu	Glu	Ile	Asn	Asp	Val	Thr	Arg	Ala	Trp
	195						200					205			
Gly	Leu	Glu	Val	Asp	Arg	Val	Glu	Leu	Ala	Val	Glu	Ala	Val	Leu	Gln
	210					215					220				
Pro	Pro	Gln	Asp	Ser	Pro	Ala	Gly	Pro	Asn	Leu	Asp	Ser	Thr	Leu	Gln
225					230					235					240
Gln	Leu	Ala	Leu	His	Phe	Leu	Gly	Gly	Ser	Met	Asn	Ser	Met	Ala	Gly
				245					250					255	
Gly	Ala	Pro	Ser	Pro	Gly	Pro	Ala	Asp	Thr	Val	Glu	Met	Val	Ser	Glu
			260					265					270		
Val	Glu	Pro	Pro	Ala	Pro	Gln	Val	Gly	Ala	Arg	Ser	Ser	Pro	Lys	Gln
	275						280						285		
Pro	Leu	Ala	Glu	Gly	Leu	Leu	Thr	Ala	Leu	Gln	Pro	Phe	Leu	Ser	Glu
	290					295					300				
Ala	Leu	Val	Ser	Gln	Val	Gly	Ala	Cys	Tyr	Gln	Phe	Asn	Val	Val	Leu
305					310					315					320
Pro	Ser	Gly	Thr	Gln	Ser	Ala	Tyr	Phe	Leu	Asp	Leu	Thr	Thr	Gly	Arg
				325					330					335	
Gly	Arg	Val	Gly	His	Gly	Val	Pro	Asp	Gly	Ile	Pro	Asp	Val	Val	Val
			340					345						350	
Glu	Met	Ala	Glu	Ala	Asp	Leu	Arg	Ala	Leu	Leu	Cys	Arg	Glu	Leu	Arg
	355						360					365			
Pro	Leu	Gly	Ala	Tyr	Met	Ser	Gly	Arg	Leu	Lys	Val	Lys	Gly	Asp	Leu
	370					375					380				
Ala	Met	Ala	Met	Lys	Leu	Glu	Ala	Val	Leu	Arg	Ala	Leu	Lys	*	
385					390					395			398		

<210> 1674

<211> 122

<212> PRT

<213> Homo sapiens

<400> 1674

Met	Ala	Thr	Glu	Gly	Asp	Val	Glu	Leu	Glu	Leu	Glu	Thr	Glu	Thr	Ser
1				5					10					15	
Gly	Pro	Glu	Arg	Pro	Pro	Glu	Lys	Pro	Arg	Lys	His	Asp	Ser	Gly	Ala
			20					25					30		
Ala	Asp	Leu	Glu	Arg	Val	Thr	Asp	Tyr	Ala	Glu	Glu	Lys	Glu	Ile	Gln
	35						40					45			
Ser	Ser	Asn	Leu	Glu	Thr	Ala	Met	Ser	Val	Ile	Gly	Asp	Arg	Arg	Ser
	50					55					60				
Arg	Glu	Gln	Lys	Ala	Lys	Gln	Glu	Arg	Glu	Lys	Glu	Leu	Ala	Lys	Val
	65				70					75					80

Thr Ile Lys Lys Glu Asp Leu Glu Leu Ile Met Thr Glu Met Glu Ile
 85 90 95
 Ser Arg Ala Ala Ala Glu Arg Ser Leu Arg Glu His Met Gly Asn Val
 100 105 110
 Val Glu Ala Leu Ile Ala Leu Thr Asn *
 115 120 121

<210> 1675
 <211> 140
 <212> PRT
 <213> Homo sapiens

<400> 1675
 Met Glu Ala Val Val Phe Val Phe Ser Leu Leu Asp Cys Cys Ala Leu
 1 5 10 15
 Ile Phe Leu Ser Val Tyr Phe Ile Ile Thr Leu Ser Asp Leu Glu Cys
 20 25 30
 Asp Tyr Ile Asn Ala Arg Ser Cys Cys Ser Lys Leu Asn Lys Trp Val
 35 40 45
 Ile Pro Glu Leu Ile Gly His Thr Ile Val Thr Val Leu Leu Leu Met
 50 55 60
 Ser Leu His Trp Phe Ile Phe Leu Leu Asn Leu Pro Val Ala Thr Trp
 65 70 75 80
 Asn Ile Tyr Arg Tyr Ile Met Val Pro Ser Gly Asn Met Gly Val Phe
 85 90 95
 Asp Pro Thr Glu Ile His Asn Arg Gly Gln Leu Lys Ser His Met Lys
 100 105 110
 Glu Ala Met Ile Lys Leu Gly Phe His Leu Leu Cys Phe Phe Met Tyr
 115 120 125
 Leu Tyr Ser Met Ile Leu Ala Leu Ile Asn Asp *
 130 135 139

<210> 1676
 <211> 804
 <212> PRT
 <213> Homo sapiens

<400> 1676
 Met Glu Ile Pro Lys Leu Leu Pro Ala Arg Gly Thr Leu Gln Gly Gly
 1 5 10 15
 Gly Gly Gly Gly Ile Pro Ala Gly Gly Gly Arg Val His Arg Gly Pro
 20 25 30
 Asp Ser Pro Ala Gly Gln Val Pro Thr Arg Arg Leu Leu Leu Leu Arg
 35 40 45
 Gly Pro Gln Asp Gly Gly Pro Gly Arg Arg Arg Glu Glu Ala Ser Thr
 50 55 60
 Ala Ser Arg Gly Pro Gly Pro Ser Leu Leu Ala Pro Arg Thr Asp Gln
 65 70 75 80
 Pro Ser Gly Gly Gly Gly Gly Gly Gly Gly Asp Asp Phe Phe Leu Val Leu
 85 90 95
 Leu Asp Pro Val Gly Gly Asp Val Glu Thr Ala Gly Ser Gly Gln Ala
 100 105 110
 Ala Gly Pro Val Leu Arg Glu Glu Ala Glu Glu Gly Pro Gly Leu Gln
 115 120 125
 Gly Gly Glu Ser Gly Ala Asn Pro Ala Gly Pro Thr Ala Leu Gly Pro
 130 135 140
 Arg Cys Leu Ser Ala Val Pro Thr Pro Ala Pro Ile Ser Ala Pro Gly
 145 150 155 160

Pro	Ala	Ala	Ala	Phe	Ala	Gly	Thr	Val	Thr	Ile	His	Asn	Gln	Asp	Leu	165	170	175
Leu	Leu	Arg	Phe	Glu	Asn	Gly	Val	Leu	Thr	Leu	Ala	Thr	Pro	Pro	Pro	180	185	190
His	Ala	Trp	Glu	Pro	Gly	Ala	Ala	Pro	Ala	Gln	Gln	Pro	Gly	Cys	Leu	195	200	205
Ile	Ala	Pro	Gln	Ala	Gly	Phe	Pro	His	Ala	Ala	His	Pro	Gly	Asp	Cys	210	215	220
Pro	Glu	Leu	Pro	Pro	Asp	Leu	Leu	Leu	Ala	Glu	Pro	Ala	Glu	Pro	Ala	225	230	235
Pro	Ala	Pro	Ala	Pro	Glu	Glu	Glu	Ala	Glu	Gly	Pro	Ala	Ala	Ala	Leu	245	250	255
Gly	Pro	Arg	Gly	Pro	Leu	Gly	Ser	Gly	Pro	Gly	Val	Val	Leu	Tyr	Leu	260	265	270
Cys	Pro	Glu	Ala	Gln	Cys	Gly	Gln	Thr	Phe	Ala	Lys	Lys	His	Gln	Leu	275	280	285
Lys	Val	His	Leu	Leu	Thr	His	Ser	Ser	Ser	Gln	Gly	Gln	Arg	Pro	Phe	290	295	300
Lys	Cys	Pro	Leu	Gly	Gly	Cys	Gly	Trp	Thr	Phe	Thr	Thr	Ser	Tyr	Lys	305	310	315
Leu	Lys	Arg	His	Leu	Gln	Ser	His	Asp	Lys	Leu	Arg	Pro	Phe	Gly	Cys	325	330	335
Pro	Ala	Glu	Gly	Cys	Gly	Lys	Ser	Phe	Thr	Thr	Val	Tyr	Asn	Leu	Lys	340	345	350
Ala	His	Met	Lys	Gly	His	Glu	Gln	Glu	Asn	Ser	Phe	Lys	Cys	Glu	Val	355	360	365
Cys	Glu	Glu	Ser	Phe	Pro	Thr	Gln	Ala	Lys	Leu	Ser	Ala	His	Gln	Arg	370	375	380
Ser	His	Phe	Glu	Pro	Glu	Arg	Pro	Tyr	Gln	Cys	Ala	Phe	Ser	Gly	Cys	385	390	395
Lys	Lys	Thr	Phe	Ile	Thr	Val	Ser	Ala	Leu	Phe	Ser	His	Asn	Arg	Ala	405	410	415
His	Phe	Arg	Glu	Gln	Glu	Leu	Phe	Ser	Cys	Ser	Phe	Pro	Gly	Cys	Ser	420	425	430
Lys	Gln	Tyr	Asp	Lys	Ala	Cys	Arg	Leu	Lys	Ile	His	Leu	Arg	Ser	His	435	440	445
Thr	Gly	Glu	Arg	Pro	Phe	Leu	Cys	Asp	Phe	Asp	Gly	Cys	Gly	Trp	Asn	450	455	460
Phe	Thr	Ser	Met	Ser	Lys	Leu	Leu	Arg	His	Lys	Arg	Lys	His	Asp	Asp	465	470	475
Asp	Arg	Arg	Phe	Met	Cys	Pro	Val	Glu	Gly	Cys	Gly	Lys	Ser	Phe	Thr	485	490	495
Arg	Ala	Glu	His	Leu	Lys	Gly	His	Ser	Ile	Thr	His	Leu	Gly	Thr	Lys	500	505	510
Pro	Phe	Val	Cys	Pro	Val	Ala	Gly	Cys	Cys	Ala	Arg	Phe	Ser	Ala	Arg	515	520	525
Ser	Ser	Leu	Tyr	Ile	His	Ser	Lys	Lys	His	Leu	Gln	Asp	Val	Asp	Thr	530	535	540
Trp	Lys	Ser	Arg	Cys	Pro	Ile	Ser	Ser	Cys	Asn	Lys	Leu	Phe	Thr	Ser	545	550	555
Lys	His	Ser	Met	Lys	Thr	His	Met	Val	Lys	Arg	His	Lys	Val	Gly	Gln	565	570	575
Asp	Leu	Leu	Ala	Gln	Leu	Glu	Ala	Ala	Asn	Ser	Leu	Thr	Pro	Ser	Ser	580	585	590
Glu	Leu	Thr	Ser	Gln	Arg	Gln	Asn	Asp	Leu	Ser	Asp	Ala	Glu	Ile	Val	595	600	605
Ser	Leu	Phe	Ser	Asp	Val	Pro	Asp	Ser	Thr	Ser	Ala	Ala	Leu	Leu	Asp	610	615	620
Thr	Ala	Leu	Val	Asn	Ser	Gly	Ile	Leu	Thr	Ile	Asp	Val	Ala	Ser	Val	625	630	635
Ser	Ser	Thr	Leu	Ala	Gly	His	Leu	Pro	Ala	Asn	Asn	Asn	Asn	Ser	Val	645	650	655
Gly	Gln	Ala	Val	Asp	Pro	Pro	Ser	Leu	Met	Ala	Thr	Ser	Asp	Pro	Pro	660	665	670

Gln Ser Leu Asp Thr Ser Leu Phe Phe Gly Thr Ala Ala Thr Gly Phe
 675 680 685
 Gln Gln Ser Ser Leu Asn Met Asp Glu Val Ser Ser Val Ser Val Gly
 690 695 700
 Pro Leu Gly Ser Leu Asp Ser Leu Ala Met Lys Asn Ser Ser Pro Glu
 705 710 715 720
 Pro Gln Ala Leu Thr Pro Ser Ser Lys Leu Thr Val Asp Thr Asp Ala
 725 730 735
 Leu Thr Pro Ser Ser Thr Leu Cys Glu Asn Ser Val Ser Glu Leu Leu
 740 745 750
 Thr Pro Thr Lys Ala Glu Trp Asn Val His Pro Asp Ser Asp Phe Phe
 755 760 765
 Gly Gln Glu Gly Glu Thr Gln Phe Gly Phe Pro Asn Ala Ala Gly Asn
 770 775 780
 His Gly Ser Gln Lys Glu Thr Asp Leu Ile Thr Val Thr Gly Ser Ser
 785 790 795 800
 Phe Leu Val *
 803

<210> 1677
 <211> 156
 <212> PRT
 <213> Homo sapiens

<400> 1677
 Met Ala Ser Leu Lys Cys Ser Thr Val Val Cys Val Ile Cys Leu Glu
 1 5 10 15
 Lys Pro Lys Tyr Arg Cys Pro Ala Cys Arg Val Pro Tyr Cys Ser Val
 20 25 30
 Val Cys Phe Arg Lys His Lys Glu Gln Cys Asn Pro Glu Thr Arg Pro
 35 40 45
 Val Glu Lys Lys Ile Arg Ser Ala Leu Pro Thr Lys Thr Val Lys Pro
 50 55 60
 Val Glu Asn Lys Asp Asp Asp Ser Ile Ala Asp Phe Leu Asn Ser
 65 70 75 80
 Asp Glu Glu Glu Asp Arg Val Ser Leu Gln Asn Leu Lys Asn Leu Gly
 85 90 95
 Glu Ser Ala Thr Leu Arg Ser Leu Leu Leu Asn Pro His Leu Arg Gln
 100 105 110
 Leu Met Val Asn Leu Asp Gln Gly Glu Asp Lys Ala Lys Leu Met Arg
 115 120 125
 Ala Tyr Met Gln Glu Pro Leu Phe Val Glu Phe Ala Asp Cys Cys Leu
 130 135 140
 Gly Ile Val Glu Pro Ser Gln Asn Glu Glu Ser *
 145 150 155

<210> 1678
 <211> 958
 <212> PRT
 <213> Homo sapiens

<400> 1678
 Met Pro Gly Arg Arg Pro Arg Pro Leu Ser Ala Glu Leu Gly Gly Ser
 1 5 10 15
 Thr Gln Ala Met Arg Asp Lys Cys Gly Ala Arg Asp Gly Ala Gly Thr
 20 25 30
 Cys Tyr Tyr Gly Thr Leu Lys Leu Ala Gly Pro Glu Ser Leu Arg Trp
 35 40 45

Leu	Ala	Leu	Asp	Gly	Glu	Arg	Asp	Val	Ala	Asp	Thr	Met	Lys	Asn	Phe
50						55					60				
Glu	Met	Arg	Ile	Leu	Leu	Asp	Tyr	Pro	Gly	Gly	Pro	Ser	Thr	Ile	Thr
65					70					75					80
Gly	Ser	Glu	Arg	Val	Glu	Asp	Ala	Ser	Leu	Leu	Ala	Leu	Lys	Met	Glu
				85					90					95	
Glu	Gly	Ala	Met	Ser	Glu	Gly	Gly	Gly	Lys	Asn	Ser	His	Cys	Leu	Leu
			100					105					110		
Thr	Ser	Thr	Val	Arg	Pro	Arg	Ala	Thr	Ala	Tyr	Gly	Ala	Ser	Gly	Pro
		115					120					125			
Asp	Pro	Gly	Pro	Ala	Arg	Val	Ala	Ser	Arg	Arg	Leu	Gly	Ala	Ala	Val
130						135					140				
Gly	Leu	Leu	Ser	Ala	Asp	Thr	Leu	Trp	Pro	Leu	Asn	Gly	Leu	Ala	Arg
145					150					155					160
Ala	Ile	Asp	Glu	Glu	Ile	Glu	Ala	Leu	Arg	Asp	Asp	Ser	Gly	Asp	Asp
				165					170					175	
Asp	Glu	Ala	Thr	Thr	Pro	Ala	Asp	Lys	Ser	Glu	Leu	His	His	Thr	Leu
			180					185					190		
Lys	Asn	Leu	Ser	Leu	Lys	Leu	Asp	Asp	Leu	Ser	Thr	Cys	Asn	Asp	Leu
		195					200					205			
Ile	Ala	Lys	His	Gly	Ala	Ala	Leu	Gln	Arg	Ser	Leu	Thr	Glu	Leu	Asp
210					215						220				
Gly	Leu	Lys	Ile	Pro	Ser	Glu	Ser	Gly	Glu	Lys	Leu	Lys	Val	Val	Asn
225					230					235					240
Glu	Arg	Ala	Thr	Leu	Phe	Arg	Ile	Thr	Ser	Asn	Ala	Met	Ile	Asn	Gly
				245					250					255	
Ala	Ala	Ala	Ile	Leu	Thr	Ser	Tyr	Gln	Glu	Trp	Leu	Gln	Pro	Gln	Gly
			260					265					270		
Phe	Glu	Gly	Thr	Arg	Cys	Ser	Glu	Val	Val	Ser	Gly	Leu	Gly	Ile	Trp
		275					280					285			
Asn	Ser	Asn	Ala	Val	Phe	Gln	Pro	Pro	Thr	Pro	Leu	Pro	Val	Leu	Tyr
290						295					300				
Leu	Leu	Glu	His	Pro	Phe	Leu	Thr	Leu	Gln	His	Ser	Gln	Asp	Gly	Ala
305					310					315					320
Trp	Arg	Arg	Pro	Ala	Ala	Ala	Glu	Glu	Thr	Leu	Gly	Val	Arg	Asp	Gly
				325					330					335	
His	Gln	Val	Arg	Thr	Gly	Val	Pro	Ile	Phe	Leu	Leu	Trp	Gly	Gly	Thr
			340					345					350		
Ala	Cys	Asp	Val	His	Gly	Ala	Gln	Trp	Val	Leu	Gln	Ala	Cys	Arg	Asp
		355					360					365			
Phe	Leu	Glu	Leu	Ala	Glu	Ile	His	Ser	Arg	Lys	Trp	Gln	Arg	Ala	Leu
370						375					380				
Gln	Tyr	Glu	Gln	Glu	Gln	Arg	Val	His	Leu	Glu	Glu	Thr	Ile	Glu	Gln
385					390					395					400
Leu	Ala	Lys	Gln	His	Asn	Ser	Leu	Glu	Arg	Ala	Phe	His	Ser	Ala	Pro
				405					410					415	
Gly	Arg	Pro	Ala	Asn	Pro	Ser	Lys	Ser	Phe	Ile	Glu	Gly	Ser	Leu	Leu
			420					425					430		
Thr	Pro	Lys	Gly	Glu	Asp	Ser	Glu	Glu	Asp	Glu	Asp	Thr	Glu	Tyr	Phe
		435					440					445			
Asp	Ala	Met	Glu	Asp	Ser	Thr	Ser	Phe	Ile	Thr	Val	Ile	Thr	Glu	Ala
450						455					460				
Lys	Glu	Asp	Ser	Arg	Lys	Ala	Glu	Gly	Ser	Thr	Gly	Thr	Ser	Ser	Val
465					470					475					480
Asp	Trp	Ser	Ser	Ala	Asp	Asn	Val	Leu	Asp	Gly	Ala	Ser	Leu	Val	Pro
				485					490					495	
Lys	Gly	Ser	Ser	Lys	Val	Lys	Arg	Arg	Val	Arg	Ile	Pro	Asn	Lys	Pro
			500					505					510		
Asn	Tyr	Ser	Leu	Asn	Leu	Trp	Ser	Ile	Met	Lys	Asn	Cys	Ile	Gly	Arg
		515					520					525			
Glu	Leu	Ser	Arg	Ile	Pro	Met	Pro	Val	Asn	Phe	Asn	Glu	Pro	Leu	Ser
530						535					540				
Met	Leu	Gln	Arg	Leu	Thr	Glu	Asp	Leu	Glu	Tyr	His	His	Leu	Leu	Asp
545					550					555					560

Lys Ala Val His Cys Thr Ser Ser Val Glu Gln Met Cys Leu Val Ala
 565 570 575
 Ala Phe Ser Val Ser Ser Tyr Ser Thr Thr Val His Arg Ile Ala Lys
 580 585 590
 Pro Phe Asn Pro Met Leu Gly Glu Thr Phe Glu Leu Asp Arg Leu Asp
 595 600 605
 Asp Met Gly Leu Arg Ser Leu Cys Glu Gln Val Ser His His Pro Pro
 610 615 620
 Ser Ala Ala His Tyr Val Phe Ser Lys His Gly Trp Ser Leu Trp Gln
 625 630 635 640
 Glu Ile Thr Ile Ser Ser Lys Phe Arg Gly Lys Tyr Ile Ser Ile Met
 645 650 655
 Pro Leu Gly Ala Ile His Leu Glu Phe Gln Ala Ser Gly Asn His Tyr
 660 665 670
 Val Trp Arg Lys Ser Thr Ser Thr Val His Asn Ile Ile Val Gly Lys
 675 680 685
 Leu Trp Ile Asp Gln Ser Gly Asp Ile Glu Ile Val Asn His Lys Thr
 690 695 700
 Asn Asp Arg Cys Gln Leu Lys Phe Leu Pro Tyr Ser Tyr Phe Ser Lys
 705 710 715 720
 Glu Ala Ala Arg Lys Val Thr Gly Val Val Ser Asp Ser Gln Gly Lys
 725 730 735
 Ala His Tyr Val Leu Ser Gly Ser Trp Asp Glu Gln Met Glu Cys Ser
 740 745 750
 Lys Val Met His Ser Ser Pro Ser Ser Pro Ser Ser Asp Gly Lys Gln
 755 760 765
 Lys Thr Val Tyr Gln Thr Leu Ser Ala Lys Leu Leu Trp Lys Lys Tyr
 770 775 780
 Pro Leu Pro Glu Asn Ala Glu Asn Met Tyr Tyr Phe Ser Glu Leu Ala
 785 790 795 800
 Leu Thr Leu Asn Glu His Glu Glu Gly Val Ala Pro Thr Asp Ser Arg
 805 810 815
 Leu Arg Pro Asp Gln Arg Leu Met Glu Lys Gly Arg Trp Asp Glu Ala
 820 825 830
 Asn Thr Glu Lys Gln Arg Leu Glu Glu Lys Gln Arg Leu Ser Arg Arg
 835 840 845
 Arg Arg Leu Glu Ala Cys Gly Pro Gly Ser Ser Cys Ser Ser Glu Glu
 850 855 860
 Glu Gly Val Lys Ala Phe Asp Lys Ile Gln Pro Val Ser Arg Gly His
 865 870 875 880
 Ser Pro Arg Phe Ile Leu Cys Asp Cys Cys Pro Leu Ala Pro Asn Ser
 885 890 895
 Gly Arg Thr Gly Asn Tyr Arg Lys Leu Ala Arg Leu Pro Lys Arg Met
 900 905 910
 Arg Arg Ser Arg Tyr Gly His Val Arg Arg Ala Ser Lys Thr Thr Gln
 915 920 925
 Ala Ser Cys Arg Phe Arg Leu Glu Arg Val Ala Gly Leu Arg Lys Pro
 930 935 940
 Ser Thr Val His Asn Arg Trp Leu Val Met Asn Arg Ser *
 945 950 955 957

<210> 1679

<211> 2190

<212> PRT

<213> Homo sapiens

<400> 1679

Met Gly Ile Phe Val Lys Thr Ile Phe Pro Asn Gly Ser Ala Ala Glu
 1 5 10 15
 Asp Gly Arg Leu Lys Glu Gly Asp Glu Ile Leu Asp Val Asn Gly Ile
 20 25 30

Pro	Ile	Lys	Gly	Leu	Thr	Phe	Gln	Glu	Ala	Ile	His	Thr	Phe	Lys	Gln
		35					40					45			
Ile	Arg	Ser	Gly	Leu	Phe	Val	Leu	Thr	Val	Arg	Thr	Lys	Leu	Val	Ser
	50				55					60					
Pro	Ser	Leu	Thr	Pro	Cys	Ser	Thr	Pro	Thr	His	Met	Ser	Arg	Ser	Ala
	65				70					75					80
Ser	Pro	Asn	Phe	Asn	Thr	Ser	Gly	Gly	Ala	Ser	Ala	Gly	Gly	Ser	Asp
			85						90					95	
Glu	Gly	Ser	Ser	Ser	Ser	Leu	Gly	Arg	Lys	Thr	Pro	Gly	Pro	Lys	Asp
			100					105					110		
Arg	Ile	Val	Met	Glu	Val	Thr	Leu	Asn	Lys	Glu	Pro	Arg	Val	Gly	Leu
	115						120					125			
Gly	Ile	Gly	Ala	Cys	Cys	Leu	Ala	Leu	Glu	Asn	Ser	Pro	Pro	Gly	Ile
	130					135						140			
Tyr	Ile	His	Ser	Leu	Ala	Pro	Gly	Ser	Val	Ala	Lys	Met	Glu	Ser	Asn
	145				150					155					160
Leu	Ser	Arg	Gly	Asp	Gln	Ile	Leu	Glu	Val	Asn	Ser	Val	Asn	Val	Arg
				165					170					175	
His	Ala	Ala	Leu	Ser	Lys	Val	His	Ala	Ile	Leu	Ser	Lys	Cys	Pro	Pro
			180					185					190		
Gly	Pro	Val	Arg	Leu	Val	Ile	Gly	Arg	His	Pro	Asn	Pro	Lys	Asp	Ser
	195						200					205			
Leu	Ile	Ser	Glu	Ser	Glu	Leu	Ser	Gln	Tyr	Phe	Ala	His	Asp	Val	Pro
	210					215					220				
Gly	Pro	Leu	Ser	Asp	Phe	Met	Val	Ala	Gly	Ser	Glu	Asp	Glu	Asp	His
	225				230					235					240
Pro	Gly	Ser	Gly	Cys	Ser	Thr	Ser	Glu	Glu	Gly	Ser	Leu	Pro	Pro	Ser
				245					250					255	
Thr	Ser	Thr	His	Lys	Glu	Pro	Gly	Lys	Pro	Arg	Ala	Asn	Ser	Leu	Val
			260					265					270		
Thr	Leu	Gly	Ser	His	Arg	Ala	Ser	Gly	Leu	Phe	His	Lys	Gln	Val	Thr
	275						280					285			
Val	Ala	Arg	Gln	Ala	Ser	Leu	Pro	Gly	Ser	Pro	Gln	Ala	Leu	Arg	Asn
	290					295					300				
Pro	Leu	Leu	Arg	Gln	Arg	Lys	Val	Gly	Cys	Tyr	Asp	Ala	Asn	Asp	Ala
	305				310					315					320
Ser	Asp	Glu	Glu	Glu	Phe	Asp	Arg	Glu	Gly	Asp	Cys	Ile	Ser	Leu	Pro
				325					330					335	
Gly	Ala	Leu	Pro	Gly	Pro	Ile	Arg	Pro	Leu	Ser	Glu	Asp	Asp	Pro	Arg
			340					345					350		
Arg	Val	Ser	Ile	Ser	Ser	Ser	Lys	Gly	Met	Asp	Val	His	Asn	Gln	Glu
	355						360					365			
Glu	Arg	Pro	Arg	Lys	Thr	Leu	Val	Ser	Lys	Ala	Ile	Ser	Ala	Pro	Leu
	370					375					380				
Leu	Gly	Ser	Ser	Val	Asp	Leu	Glu	Glu	Ser	Ile	Pro	Glu	Gly	Met	Val
	385				390					395					400
Asp	Ala	Ala	Ser	Tyr	Ala	Ala	Asn	Leu	Thr	Asp	Ser	Ala	Glu	Ala	Pro
				405					410					415	
Lys	Gly	Ser	Pro	Gly	Ser	Trp	Trp	Lys	Lys	Glu	Leu	Ser	Gly	Ser	Ser
			420					425					430		
Ser	Ala	Pro	Lys	Leu	Glu	Tyr	Thr	Val	Arg	Thr	Asp	Thr	Gln	Ser	Pro
		435					440					445			
Thr	Asn	Thr	Gly	Ser	Pro	Ser	Ser	Pro	Gln	Gln	Lys	Ser	Glu	Gly	Leu
	450					455					460				
Gly	Ser	Arg	His	Arg	Pro	Val	Ala	Arg	Val	Ser	Pro	His	Cys	Lys	Arg
	465				470					475					480
Ser	Glu	Ala	Glu	Ala	Lys	Pro	Ser	Gly	Ser	Gln	Thr	Val	Asn	Leu	Thr
				485					490					495	
Gly	Arg	Ala	Asn	Asp	Pro	Cys	Asp	Leu	Asp	Ser	Arg	Val	Gln	Ala	Thr
			500					505					510		
Ser	Val	Lys	Val	Thr	Val	Ala	Gly	Phe	Gln	Pro	Gly	Gly	Ala	Val	Glu
	515						520					525			
Lys	Glu	Ser	Leu	Gly	Lys	Leu	Thr	Thr	Gly	Asp	Ala	Cys	Val	Ser	Thr
	530					535					540				

Ser	Cys	Glu	Leu	Ala	Ser	Ala	Leu	Ser	His	Leu	Asp	Ala	Ser	His	Leu
545					550					555					560
Thr	Glu	Asn	Leu	Pro	Lys	Ala	Ala	Ser	Glu	Leu	Gly	Gln	Gln	Pro	Met
				565					570						575
Thr	Glu	Leu	Asp	Ser	Ser	Ser	Asp	Leu	Ile	Ser	Ser	Pro	Gly	Lys	Lys
			580					585					590		
Gly	Ala	Ala	His	Pro	Asp	Pro	Ser	Lys	Thr	Ser	Val	Asp	Thr	Gly	Lys
	595						600					605			
Val	Ser	Arg	Pro	Glu	Asn	Pro	Ser	Gln	Pro	Ala	Ser	Pro	Arg	Val	Ala
	610					615					620				
Lys	Cys	Lys	Ala	Arg	Ser	Pro	Val	Arg	Leu	Pro	His	Glu	Gly	Ser	Pro
625					630					635					640
Ser	Pro	Gly	Glu	Lys	Ala	Ala	Ala	Pro	Pro	Asp	Tyr	Ser	Lys	Thr	Arg
				645					650						655
Ser	Ala	Ser	Glu	Thr	Ser	Thr	Pro	His	Asn	Thr	Arg	Arg	Val	Ala	Ala
			660					665					670		
Leu	Arg	Gly	Ala	Gly	Pro	Gly	Ala	Glu	Gly	Met	Thr	Pro	Ala	Gly	Ala
	675						680						685		
Val	Leu	Pro	Gly	Asp	Pro	Leu	Thr	Ser	Gln	Glu	Gln	Arg	Gln	Gly	Ala
	690					695					700				
Pro	Gly	Asn	His	Ser	Lys	Ala	Leu	Glu	Met	Thr	Gly	Ile	His	Ala	Pro
705					710					715					720
Glu	Ser	Ser	Gln	Glu	Pro	Ser	Leu	Leu	Glu	Gly	Ala	Asp	Ser	Val	Ser
			725						730						735
Ser	Arg	Ala	Pro	Gln	Ala	Ser	Leu	Ser	Met	Leu	Pro	Ser	Thr	Asp	Asn
			740					745					750		
Thr	Lys	Glu	Ala	Cys	Gly	His	Val	Ser	Gly	His	Cys	Cys	Pro	Gly	Gly
	755						760					765			
Ser	Arg	Glu	Ser	Pro	Val	Thr	Asp	Ile	Asp	Ser	Phe	Ile	Lys	Glu	Leu
	770					775					780				
Asp	Ala	Ser	Ala	Ala	Arg	Ser	Pro	Ser	Ser	Gln	Thr	Gly	Asp	Ser	Gly
785					790					795					800
Ser	Gln	Glu	Gly	Ser	Ala	Gln	Gly	His	Pro	Pro	Ala	Gly	Ala	Gly	Gly
			805						810						815
Gly	Ser	Ser	Cys	Arg	Ala	Glu	Pro	Val	Pro	Gly	Gly	Gln	Thr	Ser	Ser
			820					825					830		
Pro	Arg	Arg	Ala	Trp	Ala	Ala	Gly	Ala	Pro	Ala	Tyr	Pro	Gln	Trp	Ala
	835						840						845		
Ser	Gln	Pro	Ser	Val	Leu	Asp	Ser	Ile	Asn	Pro	Asp	Lys	His	Phe	Thr
	850					855					860				
Val	Asn	Lys	Asn	Phe	Leu	Ser	Asn	Tyr	Ser	Arg	Asn	Phe	Ser	Ser	Phe
865					870					875					880
His	Glu	Asp	Ser	Thr	Ser	Leu	Ser	Gly	Leu	Gly	Asp	Ser	Thr	Glu	Pro
			885						890						895
Ser	Leu	Ser	Ser	Met	Tyr	Gly	Asp	Ala	Glu	Asp	Ser	Ser	Ser	Asp	Pro
			900					905							
Glu	Ser	Leu	Thr	Glu	Ala	Pro	Arg	Ala	Ser	Ala	Arg	Asp	Gly	Trp	Ser
	915						920					925			
Pro	Pro	Arg	Ser	Arg	Val	Ser	Leu	His	Lys	Glu	Asp	Pro	Ser	Glu	Ser
	930					935					940				
Glu	Glu	Glu	Gln	Ile	Glu	Ile	Cys	Ser	Thr	Arg	Gly	Cys	Pro	Asn	Pro
945					950					955					960
Pro	Ser	Ser	Pro	Ala	His	Leu	Pro	Thr	Gln	Ala	Ala	Ile	Cys	Pro	Ala
			965						970						975
Ser	Ala	Lys	Val	Leu	Ser	Leu	Lys	Tyr	Ser	Thr	Pro	Arg	Glu	Ser	Val
			980					985					990		
Ala	Ser	Pro	Arg	Glu	Lys	Ala	Ala	Cys	Leu	Pro	Gly	Ser	Tyr	Thr	Ser
	995					1000							1005		
Gly	Pro	Asp	Ser	Ser	Gln	Pro	Ser	Ser	Leu	Leu	Glu	Met	Ser	Ser	Gln
	1010					1015									
Glu	His	Glu	Thr	His	Ala	Asp	Ile	Ser	Thr	Ser	Gln	Asn	His	Arg	Pro
1025					1030					1035					1040
Ser	Cys	Ala	Glu	Glu	Thr	Thr	Glu	Val	Thr	Ser	Ala	Ser	Ser	Ala	Met
			1045						1050						1055

Glu Asn Ser Pro Leu Ser Lys Val Ala Arg His Phe His Ser Pro Pro
 1060 1065 1070
 Ile Ile Leu Ser Ser Pro Asn Met Val Asn Gly Leu Glu His Asp Leu
 1075 1080 1085
 Leu Asp Asp Glu Thr Leu Asn Gln Tyr Glu Thr Ser Ile Asn Ala Ala
 1090 1095 1100
 Ala Ser Leu Ser Ser Phe Ser Val Asp Val Pro Lys Asn Gly Glu Ser
 1105 1110 1115 1120
 Val Leu Glu Asn Leu His Ile Ser Glu Ser Gln Asp Leu Asp Asp Leu
 1125 1130 1135
 Leu Gln Lys Pro Lys Met Ile Ala Arg Arg Pro Ile Met Ala Trp Phe
 1140 1145 1150
 Lys Glu Ile Asn Lys His Asn Gln Gly Thr His Leu Arg Ser Lys Thr
 1155 1160 1165
 Glu Lys Glu Gln Pro Leu Met Pro Ala Arg Ser Pro Asp Ser Lys Ile
 1170 1175 1180
 Gln Met Val Ser Ser Ser Gln Lys Lys Gly Val Thr Val Pro His Ser
 1185 1190 1195 1200
 Pro Pro Gln Pro Lys Thr Asn Leu Glu Asn Lys Asp Leu Ser Lys Lys
 1205 1210 1215
 Ser Pro Ala Glu Met Leu Leu Thr Asn Gly Gln Lys Ala Lys Cys Gly
 1220 1225 1230
 Pro Lys Leu Lys Arg Leu Ser Leu Lys Gly Lys Ala Lys Val Asn Ser
 1235 1240 1245
 Glu Ala Pro Ala Ala Asn Ala Val Lys Ala Gly Gly Thr Asp His Arg
 1250 1255 1260
 Lys Pro Leu Ile Ser Pro Gln Thr Ser His Lys Thr Leu Ser Lys Ala
 1265 1270 1275 1280
 Val Ser Gln Arg Leu His Val Ala Asp His Glu Asp Pro Asp Arg Asn
 1285 1290 1295
 Thr Thr Ala Ala Pro Arg Ser Pro Gln Cys Val Leu Glu Ser Lys Pro
 1300 1305 1310
 Pro Leu Ala Thr Ser Gly Pro Leu Lys Pro Ser Val Ser Asp Thr Ser
 1315 1320 1325
 Ile Arg Thr Phe Val Ser Pro Leu Thr Ser Pro Lys Pro Val Pro Glu
 1330 1335 1340
 Gln Gly Met Trp Ser Arg Phe His Met Ala Val Leu Ser Glu Pro Asp
 1345 1350 1355 1360
 Arg Gly Cys Pro Thr Thr Pro Lys Ser Pro Lys Cys Arg Ala Glu Gly
 1365 1370 1375
 Arg Ala Pro Arg Ala Asp Ser Gly Pro Val Ser Pro Ala Ala Ser Arg
 1380 1385 1390
 Asn Gly Met Ser Val Ala Gly Asn Arg Gln Ser Glu Pro Arg Leu Ala
 1395 1400 1405
 Ser His Val Ala Ala Asp Thr Ala Gln Pro Arg Pro Thr Gly Glu Lys
 1410 1415 1420
 Gly Gly Asn Ile Met Ala Ser Asp Arg Leu Glu Arg Thr Asn Gln Leu
 1425 1430 1435 1440
 Lys Ile Val Glu Ile Ser Ala Glu Ala Val Ser Glu Thr Val Cys Gly
 1445 1450 1455
 Asn Lys Pro Ala Glu Ser Asp Arg Arg Gly Gly Cys Leu Ala Gln Gly
 1460 1465 1470
 Asn Cys Gln Glu Lys Ser Glu Ile Arg Leu Tyr Arg Gln Val Ala Glu
 1475 1480 1485
 Ser Ser Thr Ser His Pro Ser Ser Leu Pro Ser His Ala Ser Gln Ala
 1490 1495 1500
 Glu Gln Glu Met Ser Arg Ser Phe Ser Met Thr Lys Leu Ala Ser Ser
 1505 1510 1515 1520
 Ser Ser Ser Leu Gln Thr Ala Ile Arg Lys Ala Glu Tyr Ser Gln Gly
 1525 1530 1535
 Lys Ser Ser Leu Met Ser Asp Ser Arg Gly Val Pro Arg Asn Ser Ile
 1540 1545 1550
 Pro Gly Gly Pro Ser Gly Glu Asp His Leu Tyr Phe Thr Pro Arg Pro
 1555 1560 1565

Ala Thr Arg Thr Tyr Ser Met Pro Ala Gln Phe Ser Ser His Phe Gly
1570 1575 1580
Arg Glu Gly His Pro Pro His Ser Leu Gly Arg Ser Arg Asp Ser Gln
1585 1590 1595 1600
Val Pro Val Thr Ser Ser Val Val Pro Glu Ala Lys Ala Ser Arg Gly
1605 1610 1615
Gly Leu Pro Ser Leu Ala Asn Gly Gln Gly Ile Tyr Ser Val Lys Pro
1620 1625 1630
Leu Leu Asp Thr Ser Arg Asn Leu Pro Ala Thr Asp Glu Gly Asp Ile
1635 1640 1645
Ile Ser Val Gln Glu Thr Ser Cys Leu Val Thr Asp Lys Ile Lys Val
1650 1655 1660
Thr Arg Arg His Tyr Cys Tyr Glu Gln Asn Trp Pro His Glu Ser Thr
1665 1670 1675 1680
Ser Phe Phe Ser Val Lys Gln Arg Ile Lys Ser Phe Glu Asn Leu Ala
1685 1690 1695
Asn Ala Asp Arg Pro Val Ala Lys Ser Gly Ala Ser Pro Phe Leu Ser
1700 1705 1710
Val Ser Ser Lys Pro Pro Ile Gly Arg Arg Ser Ser Gly Ser Ile Val
1715 1720 1725
Ser Gly Ser Leu Gly His Pro Gly Asp Ala Ala Ala Arg Leu Leu Arg
1730 1735 1740
Arg Ser Leu Ser Ser Cys Ser Glu Asn Gln Ser Glu Ala Gly Thr Leu
1745 1750 1755 1760
Leu Pro Gln Met Ala Lys Ser Pro Ser Ile Met Thr Leu Thr Ile Ser
1765 1770 1775
Arg Gln Asn Pro Pro Glu Thr Ser Ser Lys Gly Ser Asp Ser Glu Leu
1780 1785 1790
Lys Lys Ser Leu Gly Pro Leu Gly Ile Pro Thr Pro Thr Met Thr Leu
1795 1800 1805
Ala Ser Pro Val Lys Arg Asn Lys Ser Ser Val Arg His Thr Gln Pro
1810 1815 1820
Ser Pro Val Ser Arg Ser Lys Leu Gln Glu Leu Arg Ala Leu Ser Met
1825 1830 1835 1840
Pro Asp Leu Asp Lys Leu Cys Ser Glu Asp Tyr Ser Ala Gly Pro Ser
1845 1850 1855
Ala Val Leu Phe Lys Thr Glu Leu Glu Ile Thr Pro Arg Arg Ser Pro
1860 1865 1870
Gly Pro Pro Ala Gly Gly Val Ser Cys Pro Glu Lys Gly Gly Asn Arg
1875 1880 1885
Ala Cys Pro Gly Gly Ser Gly Pro Lys Thr Ser Ala Ala Glu Thr Pro
1890 1895 1900
Ser Ser Ala Ser Asp Thr Gly Glu Ala Ala Gln Asp Leu Pro Phe Arg
1905 1910 1915 1920
Arg Ser Trp Ser Val Asn Leu Asp Gln Leu Leu Val Ser Ala Gly Asp
1925 1930 1935
Gln Gln Arg Leu Gln Ser Val Leu Ser Ser Val Gly Ser Lys Ser Thr
1940 1945 1950
Ile Leu Thr Leu Ile Gln Glu Ala Lys Ala Gln Ser Glu Asn Glu Glu
1955 1960 1965
Asp Val Cys Phe Ile Val Leu Asn Arg Lys Glu Gly Ser Gly Leu Gly
1970 1975 1980
Phe Ser Val Ala Gly Gly Thr Asp Val Glu Pro Lys Ser Ile Thr Val
1985 1990 1995 2000
His Arg Val Phe Ser Gln Gly Ala Ala Ser Gln Glu Gly Thr Met Asn
2005 2010 2015
Arg Gly Asp Phe Leu Leu Ser Val Asn Gly Ala Ser Leu Ala Gly Leu
2020 2025 2030
Ala His Gly Asn Val Leu Lys Val Leu His Gln Ala Gln Leu His Lys
2035 2040 2045
Asp Ala Leu Val Val Ile Lys Lys Gly Met Asp Gln Pro Arg Pro Ser
2050 2055 2060
Ala Arg Gln Glu Pro Pro Thr Ala Asn Gly Lys Gly Leu Leu Ser Arg
2065 2070 2075 2080

Lys Thr Ile Pro Leu Glu Pro Gly Ile Gly Arg Ser Val Ala Val His
 2085 2090 2095
 Asp Ala Leu Cys Val Glu Val Leu Lys Thr Ser Ala Gly Leu Gly Leu
 2100 2105 2110
 Ser Leu Asp Gly Gly Lys Ser Ser Val Thr Gly Asp Gly Pro Leu Val
 2115 2120 2125
 Ile Lys Arg Val Tyr Lys Gly Gly Val Ala Glu Gln Ala Gly Ile Ile
 2130 2135 2140
 Glu Ala Gly Asp Glu Ile Leu Ala Ile Asn Gly Lys Pro Leu Val Gly
 2145 2150 2155 2160
 Leu Met His Phe Asp Ala Trp Asn Ile Met Lys Ser Val Pro Glu Gly
 2165 2170 2175
 Pro Val Gln Leu Leu Ile Arg Lys His Arg Asn Ser Ser *
 2180 2185 2189

<210> 1680
 <211> 402
 <212> PRT
 <213> Homo sapiens

<400> 1680
 Met Pro Val Gln Leu Ser Glu His Pro Glu Trp Asn Glu Ser Met His
 1 5 10 15
 Ser Leu Arg Ile Ser Val Gly Gly Leu Pro Val Leu Ala Ser Met Thr
 20 25 30
 Lys Ala Ala Asp Pro Arg Phe Arg Pro Arg Trp Lys Val Ile Leu Thr
 35 40 45
 Phe Phe Val Gly Ala Ala Ile Leu Trp Leu Leu Cys Ser His Arg Pro
 50 55 60
 Ala Pro Gly Arg Pro Pro Thr His Asn Ala His Asn Trp Arg Leu Gly
 65 70 75 80
 Gln Ala Pro Ala Asn Trp Tyr Asn Asp Thr Tyr Pro Leu Ser Pro Pro
 85 90 95
 Gln Arg Thr Pro Ala Gly Ile Arg Tyr Arg Ile Ala Val Ile Ala Asp
 100 105 110
 Leu Asp Thr Glu Ser Arg Ala Gln Glu Glu Asn Thr Trp Phe Ser Tyr
 115 120 125
 Leu Lys Lys Gly Tyr Leu Thr Leu Ser Asp Ser Gly Asp Lys Val Ala
 130 135 140
 Val Glu Trp Asp Lys Asp His Gly Val Leu Glu Ser His Leu Ala Glu
 145 150 155 160
 Lys Gly Arg Gly Met Glu Leu Ser Asp Leu Ile Val Phe Asn Gly Lys
 165 170 175
 Leu Tyr Ser Val Asp Asp Arg Thr Gly Val Val Tyr Gln Ile Glu Gly
 180 185 190
 Ser Lys Ala Val Pro Trp Val Ile Leu Ser Asp Gly Asp Gly Thr Val
 195 200 205
 Glu Lys Gly Phe Lys Ala Glu Trp Leu Ala Val Lys Asp Glu Arg Leu
 210 215 220
 Tyr Val Gly Gly Leu Gly Lys Glu Trp Thr Thr Thr Thr Gly Asp Val
 225 230 235 240
 Val Asn Glu Asn Pro Glu Trp Val Lys Val Val Gly Tyr Lys Gly Ser
 245 250 255
 Val Asp His Glu Asn Trp Val Ser Asn Tyr Asn Ala Leu Arg Ala Ala
 260 265 270
 Ala Gly Ile Gln Pro Pro Gly Tyr Leu Ile His Glu Ser Ala Cys Trp
 275 280 285
 Ser Asp Thr Leu Gln Arg Trp Phe Phe Leu Pro Arg Arg Ala Ser Gln
 290 295 300
 Glu Arg Tyr Ser Glu Lys Asp Asp Glu Arg Lys Gly Ala Asn Leu Leu
 305 310 315 320

Leu Ser Ala Ser Pro Asp Phe Gly Asp Ile Ala Val Ser His Val Gly
 325 330 335
 Ala Val Val Pro Thr His Gly Phe Ser Ser Phe Lys Phe Ile Pro Asn
 340 345 350
 Thr Asp Asp Gln Ile Ile Val Ala Leu Lys Ser Glu Glu Asp Ser Gly
 355 360 365
 Arg Val Ala Ser Tyr Ile Met Ala Phe Thr Leu Asp Gly Arg Phe Leu
 370 375 380
 Leu Pro Glu Thr Lys Ile Gly Ser Val Lys Tyr Glu Gly Ile Glu Phe
 385 390 395 400
 Ile *
 401

<210> 1681
 <211> 333
 <212> PRT
 <213> Homo sapiens

<400> 1681
 Met Asn Gly Glu Glu Glu Tyr Gly Ser Gly Ser Ala Gly Gly Ala Arg
 1 5 10 15
 Val Gly Ser Gly Glu Phe Gly Val Glu Met Ala Ala Leu Ala Pro Leu
 20 25 30
 Pro Pro Leu Pro Ala Gln Phe Lys Ser Ile Gln His His Leu Arg Thr
 35 40 45
 Ala Gln Glu His Asp Lys Arg Asp Pro Val Val Ala Tyr Tyr Cys Arg
 50 55 60
 Leu Tyr Ala Met Gln Thr Gly Met Lys Ile Asp Ser Lys Thr Pro Glu
 65 70 75 80
 Cys Arg Lys Phe Leu Ser Lys Leu Met Asp Gln Leu Glu Ala Leu Lys
 85 90 95
 Lys Gln Leu Gly Asp Asn Glu Ala Ile Thr Gln Glu Ile Val Gly Cys
 100 105 110
 Ala His Leu Glu Asn Tyr Ala Leu Lys Met Phe Leu Tyr Ala Asp Asn
 115 120 125
 Glu Asp Arg Ala Gly Arg Phe His Lys Asn Met Ile Lys Ser Phe Tyr
 130 135 140
 Thr Ala Ser Leu Leu Ile Asp Val Ile Thr Val Phe Gly Glu Leu Thr
 145 150 155 160
 Asp Glu Asn Val Lys His Arg Lys Tyr Ala Arg Trp Lys Ala Thr Tyr
 165 170 175
 Ile His Asn Cys Leu Lys Asn Gly Glu Thr Pro Gln Ala Gly Pro Val
 180 185 190
 Gly Ile Glu Glu Asp Asn Asp Ile Glu Glu Asn Glu Asp Ala Gly Ala
 195 200 205
 Ala Ser Leu Pro Thr Gln Pro Thr Gln Pro Ser Ser Ser Ser Thr Tyr
 210 215 220
 Asp Pro Ser Asn Met Pro Ser Gly Asn Tyr Thr Gly Ile Gln Ile Pro
 225 230 235 240
 Pro Gly Ala His Ala Pro Ala Asn Thr Pro Ala Glu Val Pro His Ser
 245 250 255
 Thr Gly Val Ala Ser Asn Thr Ile Gln Pro Thr Pro Gln Thr Ile Pro
 260 265 270
 Ala Ile Asp Pro Ala Leu Phe Asn Thr Ile Ser Gln Gly Asp Val Arg
 275 280 285
 Leu Thr Pro Glu Asp Phe Ala Arg Ala Gln Lys Tyr Cys Lys Tyr Ala
 290 295 300
 Gly Ser Ala Leu Gln Tyr Glu Asp Val Ser Thr Ala Val Gln Asn Leu
 305 310 315 320
 Gln Lys Ala Leu Lys Leu Leu Thr Thr Gly Arg Glu *
 325 330 332

<210> 1682
 <211> 314
 <212> PRT
 <213> Homo sapiens

<400> 1682
 Met Ala Ala Thr Leu Gly Pro Leu Gly Ser Trp Gln Gln Trp Arg Arg
 1 5 10 15
 Cys Leu Ser Ala Arg Asp Gly Ser Arg Arg Leu Leu Leu Leu Leu Leu
 20 25 30
 Leu Gly Ser Gly Gln Gly Pro Gln Gln Val Gly Ala Gly Gln Thr Phe
 35 40 45
 Glu Tyr Leu Lys Arg Glu His Ser Leu Ser Lys Pro Tyr Gln Gly Glu
 50 55 60
 Ala Pro Arg Pro Cys Phe Leu Arg Asp Trp Glu Leu Gln Val His Phe
 65 70 75 80
 Lys Ile His Gly Gln Gly Lys Lys Asn Leu His Gly Asp Gly Leu Ala
 85 90 95
 Ile Trp Tyr Thr Lys Asp Arg Met Gln Pro Gly Pro Val Phe Gly Asn
 100 105 110
 Met Asp Lys Phe Val Gly Leu Gly Val Phe Val Asp Thr Tyr Pro Asn
 115 120 125
 Glu Glu Lys Gln Gln Glu Arg Val Phe Pro Tyr Ile Ser Ala Met Val
 130 135 140
 Asn Asn Gly Ser Leu Ser Tyr Asp His Glu Arg Asp Gly Arg Pro Thr
 145 150 155 160
 Glu Leu Gly Gly Cys Thr Ala Ile Val Arg Asn Leu His Tyr Asp Thr
 165 170 175
 Phe Leu Val Ile Arg Tyr Val Lys Arg His Leu Thr Ile Met Met Asp
 180 185 190
 Ile Asp Gly Lys His Glu Trp Arg Asp Cys Ile Glu Val Pro Gly Val
 195 200 205
 Arg Leu Pro Arg Gly Tyr Tyr Phe Gly Thr Ser Ser Ile Thr Gly Asp
 210 215 220
 Leu Ser Asp Asn His Asp Val Ile Ser Leu Lys Leu Phe Glu Leu Thr
 225 230 235 240
 Val Glu Arg Thr Pro Glu Glu Glu Lys Leu His Arg Asp Val Phe Leu
 245 250 255
 Pro Ser Val Asp Asn Met Lys Leu Pro Glu Met Thr Ala Pro Leu Pro
 260 265 270
 Pro Leu Ser Gly Leu Ala Leu Phe Leu Ile Val Phe Phe Ser Leu Val
 275 280 285
 Phe Ser Val Phe Ala Ile Val Ile Gly Ile Ile Leu Tyr Asn Lys Trp
 290 295 300
 Gln Glu Gln Ser Arg Lys Arg Phe Tyr *
 305 310 313

<210> 1683
 <211> 378
 <212> PRT
 <213> Homo sapiens

<400> 1683
 Met Gln Pro Pro Pro Pro Gly Pro Leu Gly Asp Cys Leu Arg Asp Trp
 1 5 10 15
 Glu Asp Leu Gln Gln Asp Phe Gln Asn Ile Gln Glu Thr His Arg Leu
 20 25 30

Tyr	Arg	Leu	Lys	Leu	Glu	Glu	Leu	Thr	Lys	Leu	Gln	Asn	Asn	Cys	Thr
		35					40					45			
Ser	Ser	Ile	Thr	Arg	Gln	Lys	Lys	Arg	Leu	Gln	Glu	Leu	Ala	Leu	Ala
	50					55					60				
Leu	Lys	Lys	Cys	Lys	Pro	Ser	Leu	Pro	Ala	Glu	Ala	Glu	Gly	Ala	Ala
	65				70					75					80
Gln	Glu	Leu	Glu	Asn	Gln	Met	Lys	Glu	Arg	Gln	Gly	Leu	Phe	Phe	Asp
				85				90						95	
Met	Glu	Ala	Tyr	Leu	Pro	Lys	Lys	Asn	Gly	Leu	Tyr	Leu	Ser	Leu	Val
			100					105					110		
Leu	Gly	Asn	Val	Asn	Val	Thr	Leu	Leu	Ser	Lys	Gln	Ala	Lys	Phe	Ala
		115					120					125			
Tyr	Lys	Asp	Glu	Tyr	Glu	Lys	Phe	Lys	Leu	Tyr	Leu	Thr	Ile	Ile	Leu
	130					135					140				
Ile	Leu	Ile	Ser	Phe	Thr	Cys	Arg	Phe	Leu	Leu	Asn	Ser	Arg	Val	Thr
	145				150					155					160
Asp	Ala	Ala	Phe	Asn	Phe	Leu	Leu	Val	Trp	Tyr	Tyr	Cys	Thr	Leu	Thr
				165					170					175	
Ile	Arg	Glu	Ser	Ile	Leu	Ile	Asn	Asn	Gly	Ser	Arg	Ile	Lys	Gly	Trp
			180					185					190		
Trp	Val	Phe	His	His	Tyr	Val	Ser	Thr	Phe	Leu	Ser	Gly	Val	Met	Leu
		195					200					205			
Thr	Trp	Pro	Asp	Gly	Leu	Met	Tyr	Gln	Lys	Phe	Arg	Asn	Gln	Phe	Leu
	210					215					220				
Ser	Phe	Ser	Met	Tyr	Gln	Ser	Phe	Val	Gln	Phe	Leu	Gln	Tyr	Tyr	Tyr
	225				230					235					240
Gln	Ser	Gly	Cys	Leu	Tyr	Arg	Leu	Arg	Ala	Leu	Gly	Glu	Arg	His	Thr
				245					250					255	
Met	Asp	Leu	Thr	Val	Glu	Gly	Phe	Gln	Ser	Trp	Met	Trp	Arg	Gly	Leu
			260					265					270		
Thr	Phe	Leu	Leu	Pro	Phe	Leu	Phe	Phe	Gly	His	Phe	Trp	Gln	Leu	Phe
		275					280					285			
Asn	Ala	Leu	Thr	Leu	Phe	Asn	Leu	Ala	Gln	Asp	Pro	Gln	Cys	Lys	Glu
		290				295					300				
Trp	Gln	Val	Leu	Met	Cys	Gly	Phe	Pro	Phe	Leu	Leu	Leu	Phe	Leu	Gly
	305				310					315					320
Asn	Phe	Phe	Thr	Thr	Leu	Arg	Val	Val	His	Gln	Leu	His	His	Ala	Ala
				325					330					335	
Glu	Glu	Ala	Ala	Pro	Gly	Ala	Gly	Pro	Ser	Pro	Glu	Glu	Met	Gln	Thr
			340					345					350		
Leu	Pro	Pro	Ser	Arg	Gly	Arg	Gly	Gly	Arg	Thr	Gly	Ala	Gly	Glu	Pro
		355					360					365			
Asp	Glu	Arg	Ala	Pro	Arg	Pro	Leu	Leu	*						
	370					375		377							

<210> 1684

<211> 195

<212> PRT

<213> Homo sapiens

<400> 1684

Met	Ser	Ala	Leu	Trp	Leu	Leu	Leu	Gly	Leu	Leu	Ala	Leu	Met	Asp	Leu
	1			5					10					15	
Ser	Glu	Ser	Ser	Asn	Trp	Gly	Cys	Tyr	Gly	Asn	Ile	Gln	Ser	Leu	Asp
		20						25					30		
Thr	Pro	Gly	Ala	Ser	Cys	Gly	Ile	Gly	Arg	Arg	His	Gly	Leu	Asn	Tyr
		35					40					45			
Cys	Gly	Val	Arg	Ala	Ser	Glu	Arg	Leu	Ala	Glu	Ile	Asp	Met	Pro	Tyr
	50					55					60				
Leu	Leu	Lys	Tyr	Gln	Pro	Met	Met	Gln	Thr	Ile	Gly	Gln	Lys	Tyr	Cys
	65				70					75					80

Met Asp Pro Ala Val Ile Ala Gly Val Leu Ser Arg Lys Ser Pro Gly
 85 90 95
 Asp Lys Ile Leu Val Asn Met Gly Asp Arg Thr Ser Met Val Gln Asp
 100 105 110
 Pro Gly Ser Gln Ala Pro Thr Ser Trp Ile Ser Glu Ser Gln Val Ser
 115 120 125
 Gln Thr Thr Glu Val Leu Thr Thr Arg Ile Lys Glu Ile Gln Arg Arg
 130 135 140
 Phe Pro Thr Trp Thr Pro Asp Gln Tyr Leu Arg Gly Gly Leu Cys Ala
 145 150 155 160
 Tyr Ser Gly Gly Ala Gly Tyr Val Arg Ser Ser Gln Asp Leu Ser Cys
 165 170 175
 Asp Phe Cys Asn Asp Val Leu Ala Arg Ala Lys Tyr Leu Lys Arg His
 180 185 190
 Gly Phe *
 194

<210> 1685
 <211> 229
 <212> PRT
 <213> Homo sapiens

<400> 1685
 Met Lys Ile Lys Pro Gly Phe Met Gly Lys Ala Thr Pro Pro Tyr Asp
 1 5 10 15
 Val Gln Phe His Met Glu Ala Ser Val Glu Asn Cys Ile Ile Val Ser
 20 25 30
 Met Asn Thr Ala Asp Pro Gly Ser Gln Gly Ile Thr His Ser Leu Leu
 35 40 45
 Leu Gln Val Ile Asp Asp Lys Gly Ser Ile Leu Pro Pro Asn Thr Glu
 50 55 60
 Gly Asn Ile Gly Ile Arg Ile Lys Pro Val Arg Pro Val Ser Leu Phe
 65 70 75 80
 Met Cys Tyr Glu Gly Asp Pro Glu Lys Thr Ala Lys Val Glu Cys Gly
 85 90 95
 Asp Phe Tyr Asn Thr Gly Asp Arg Gly Lys Met Asp Glu Glu Gly Tyr
 100 105 110
 Ile Cys Phe Leu Gly Arg Ser Asp Asp Ile Ile Asn Ala Ser Gly Tyr
 115 120 125
 Arg Ile Gly Pro Ala Glu Val Glu Ser Ala Leu Val Glu His Pro Ala
 130 135 140
 Val Ala Glu Ser Ala Val Val Gly Ser Pro Asp Pro Ile Arg Gly Glu
 145 150 155 160
 Val Val Lys Ala Phe Ile Val Leu Thr Pro Gln Phe Leu Ser His Asp
 165 170 175
 Lys Asp Gln Leu Thr Lys Glu Leu Gln Gln His Val Lys Ser Val Thr
 180 185 190
 Ala Pro Tyr Lys Tyr Pro Arg Lys Val Glu Phe Val Ser Glu Leu Pro
 195 200 205
 Lys Thr Ile Thr Gly Lys Ile Glu Arg Lys Glu Leu Arg Lys Lys Glu
 210 215 220
 Thr Gly Gln Met *
 225 228

<210> 1686
 <211> 196
 <212> PRT
 <213> Homo sapiens

<400> 1686

Met Lys Ile Lys Pro Gly Phe Met Gly Lys Ala Thr Pro Pro Tyr Asp
 1 5 10 15
 Val Gln Val Ile Asp Asp Lys Gly Ser Ile Leu Pro Pro Asn Thr Glu
 20 25 30
 Gly Asn Ile Gly Ile Arg Ile Lys Pro Val Arg Pro Val Ser Leu Phe
 35 40 45
 Met Cys Tyr Glu Gly Asp Pro Glu Lys Thr Ala Lys Val Glu Cys Gly
 50 55 60
 Asp Phe Tyr Asn Thr Gly Asp Arg Gly Lys Met Asp Glu Glu Gly Tyr
 65 70 75 80
 Ile Cys Phe Leu Gly Arg Ser Asp Asp Ile Ile Asn Ala Ser Gly Tyr
 85 90 95
 Arg Ile Gly Pro Ala Glu Val Glu Ser Ala Leu Val Glu His Pro Ala
 100 105 110
 Val Ala Glu Ser Ala Val Val Gly Ser Pro Asp Pro Ile Arg Gly Glu
 115 120 125
 Val Val Lys Ala Phe Ile Val Leu Thr Pro Gln Phe Leu Ser His Asp
 130 135 140
 Lys Asp Gln Leu Thr Lys Glu Leu Gln Gln His Val Lys Ser Val Thr
 145 150 155 160
 Ala Pro Tyr Lys Tyr Pro Arg Lys Val Glu Phe Val Ser Glu Leu Pro
 165 170 175
 Lys Thr Ile Thr Gly Lys Ile Glu Arg Lys Glu Leu Arg Lys Lys Glu
 180 185 190
 Thr Gly Gln Met
 195 196

<210> 1687

<211> 703

<212> PRT

<213> Homo sapiens

<400> 1687

Met Val Ala His Ile Asn Asn Ser Arg Leu Lys Ala Lys Gly Val Gly
 1 5 10 15
 Gln His Asp Asn Ala Gln Asn Phe Gly Asn Gln Ser Phe Glu Glu Leu
 20 25 30
 Arg Ala Ala Cys Leu Arg Lys Gly Glu Leu Phe Glu Asp Pro Leu Phe
 35 40 45
 Pro Ala Glu Pro Ser Ser Leu Gly Phe Lys Asp Leu Gly Pro Asn Ser
 50 55 60
 Lys Asn Val Gln Asn Ile Ser Trp Gln Arg Pro Lys Asp Ile Ile Asn
 65 70 75 80
 Asn Pro Leu Phe Ile Met Asp Gly Ile Ser Pro Thr Asp Ile Cys Gln
 85 90 95
 Gly Ile Leu Gly Asp Cys Trp Leu Leu Ala Ala Ile Gly Ser Leu Thr
 100 105 110
 Thr Cys Pro Lys Leu Leu Tyr Arg Val Val Pro Arg Gly Gln Ser Phe
 115 120 125
 Lys Lys Asn Tyr Ala Gly Ile Phe His Phe Gln Ile Trp Gln Phe Gly
 130 135 140
 Gln Trp Val Asn Val Val Val Asp Asp Arg Leu Pro Thr Lys Asn Asp
 145 150 155 160
 Lys Leu Val Phe Val His Ser Thr Glu Arg Ser Glu Phe Trp Ser Ala
 165 170 175
 Leu Leu Glu Lys Ala Tyr Ala Lys Leu Ser Gly Ser Tyr Glu Ala Leu
 180 185 190
 Ser Gly Gly Ser Thr Met Glu Gly Leu Glu Asp Phe Thr Gly Gly Val
 195 200 205

Ala	Gln	Ser	Phe	Gln	Leu	Gln	Arg	Pro	Pro	Gln	Asn	Leu	Leu	Arg	Leu
210						215					220				
Leu	Arg	Lys	Ala	Val	Glu	Arg	Ser	Ser	Leu	Met	Gly	Cys	Ser	Ile	Glu
225					230					235					240
Val	Thr	Ser	Asp	Ser	Glu	Leu	Glu	Ser	Met	Thr	Asp	Lys	Met	Leu	Val
				245					250					255	
Arg	Gly	His	Ala	Tyr	Ser	Val	Thr	Gly	Leu	Gln	Asp	Val	His	Tyr	Arg
			260					265					270		
Gly	Lys	Met	Glu	Thr	Leu	Ile	Arg	Val	Arg	Asn	Pro	Trp	Gly	Arg	Ile
		275					280					285			
Glu	Trp	Asn	Gly	Ala	Trp	Ser	Asp	Ser	Ala	Arg	Glu	Trp	Glu	Glu	Val
	290					295					300				
Ala	Ser	Asp	Ile	Gln	Met	Gln	Leu	Leu	His	Lys	Thr	Glu	Asp	Gly	Glu
305					310					315					320
Phe	Trp	Met	Ser	Tyr	Gln	Asp	Phe	Leu	Asn	Asn	Phe	Thr	Leu	Leu	Glu
				325					330					335	
Ile	Cys	Asn	Leu	Thr	Pro	Asp	Thr	Leu	Ser	Gly	Asp	Tyr	Lys	Ser	Tyr
			340					345					350		
Trp	His	Thr	Thr	Phe	Tyr	Glu	Gly	Ser	Trp	Arg	Arg	Gly	Ser	Ser	Ala
		355					360					365			
Gly	Gly	Cys	Arg	Asn	His	Pro	Gly	Thr	Phe	Trp	Thr	Asn	Pro	Gln	Phe
	370					375					380				
Lys	Ile	Ser	Leu	Pro	Glu	Gly	Asp	Asp	Pro	Glu	Asp	Asp	Ala	Glu	Gly
385					390					395					400
Asn	Val	Val	Val	Cys	Thr	Cys	Leu	Val	Ala	Leu	Met	Gln	Lys	Asn	Trp
			405						410					415	
Arg	His	Ala	Arg	Gln	Gln	Gly	Ala	Gln	Leu	Gln	Thr	Ile	Gly	Phe	Val
			420					425					430		
Leu	Tyr	Ala	Val	Pro	Lys	Glu	Phe	Gln	Asn	Ile	Gln	Asp	Val	His	Leu
	435						440					445			
Lys	Lys	Glu	Phe	Phe	Thr	Lys	Tyr	Gln	Asp	His	Gly	Phe	Ser	Glu	Ile
	450					455					460				
Phe	Thr	Asn	Ser	Arg	Glu	Val	Ser	Ser	Gln	Leu	Arg	Leu	Pro	Pro	Gly
465					470					475					480
Glu	Tyr	Ile	Ile	Ile	Pro	Ser	Thr	Phe	Glu	Pro	His	Arg	Asp	Ala	Asp
				485					490					495	
Phe	Leu	Leu	Arg	Val	Phe	Thr	Glu	Lys	His	Ser	Glu	Ser	Trp	Glu	Leu
			500					505					510		
Asp	Glu	Val	Asn	Tyr	Ala	Glu	Gln	Leu	Gln	Glu	Glu	Lys	Val	Ser	Glu
	515						520					525			
Asp	Asp	Met	Asp	Gln	Asp	Phe	Leu	His	Leu	Phe	Lys	Ile	Val	Ala	Gly
	530				535						540				
Glu	Gly	Lys	Glu	Ile	Gly	Val	Tyr	Glu	Leu	Gln	Arg	Leu	Leu	Asn	Arg
545					550					555					560
Met	Ala	Ile	Lys	Phe	Lys	Ser	Phe	Lys	Thr	Lys	Gly	Phe	Gly	Leu	Asp
				565					570					575	
Ala	Cys	Arg	Cys	Met	Ile	Asn	Leu	Met	Asp	Lys	Asp	Gly	Ser	Gly	Lys
			580					585					590		
Leu	Gly	Leu	Leu	Glu	Phe	Lys	Ile	Leu	Trp	Lys	Lys	Leu	Lys	Lys	Trp
	595						600					605			
Met	Asp	Ile	Phe	Arg	Glu	Cys	Asp	Gln	Asp	His	Ser	Gly	Thr	Leu	Asn
	610					615						620			
Ser	Tyr	Glu	Met	Arg	Leu	Val	Ile	Glu	Lys	Ala	Gly	Ile	Lys	Leu	Asn
625					630					635					640
Asn	Lys	Val	Met	Gln	Val	Leu	Val	Ala	Arg	Tyr	Ala	Asp	Asp	Asp	Leu
				645					650					655	
Ile	Ile	Asp	Phe	Asp	Ser	Phe	Ile	Ser	Cys	Phe	Leu	Arg	Leu	Lys	Thr
			660					665					670		
Met	Phe	Thr	Phe	Phe	Leu	Thr	Met	Asp	Pro	Lys	Asn	Thr	Gly	His	Ile
	675						680					685			
Cys	Leu	Ser	Leu	Glu	Gln	Trp	Leu	Gln	Met	Thr	Met	Trp	Gly	*	
	690					695					700		702		

<210> 1688
 <211> 31
 <212> PRT
 <213> Homo sapiens

<400> 1688
 Met Leu Ser Gly Asp Pro His Leu Pro Gln Pro Leu Cys His Cys Leu
 1 5 10 15
 Asp His Cys Pro Cys Cys Phe Ser Gly Thr Thr Arg Thr Ser *
 20 25 30

<210> 1689
 <211> 125
 <212> PRT
 <213> Homo sapiens

<400> 1689
 Met Thr Tyr Ile Lys Ser Pro Ala Pro Cys Gln Thr Gln Thr Cys Tyr
 1 5 10 15
 Val Gln Gly Ala Ser Pro Cys Gln Ser Tyr Tyr Val Gln Ala Pro Ala
 20 25 30
 Ser Gly Ser Thr Ser Gln Tyr Cys Val Thr Asp Pro Cys Ser Ala Pro
 35 40 45
 Cys Ser Thr Ser Tyr Cys Cys Leu Ala Pro Arg Thr Phe Gly Val Ser
 50 55 60
 Pro Leu Arg Arg Trp Ile Gln Arg Pro Gln Asn Cys Asn Thr Gly Ser
 65 70 75 80
 Ser Gly Cys Cys Glu Asn Ser Gly Ser Ser Gly Cys Cys Gly Ser Gly
 85 90 95
 Gly Cys Gly Cys Ser Cys Gly Cys Gly Ser Ser Gly Cys Cys Cys Leu
 100 105 110
 Gly Ile Ile Pro Met Lys Ser Arg Ser Pro Ala Leu Leu
 115 120 125

<210> 1690
 <211> 472
 <212> PRT
 <213> Homo sapiens

<400> 1690
 Met Thr Ser Phe Tyr Ser Thr Ser Ser Cys Pro Leu Gly Cys Thr Met
 1 5 10 15
 Ala Pro Gly Ala Arg Asn Val Phe Val Ser Pro Ile Asp Val Gly Cys
 20 25 30
 Gln Pro Val Ala Glu Ala Asn Ala Ala Ser Met Cys Leu Leu Ala Asn
 35 40 45
 Val Ala His Ala Asn Arg Val Arg Val Gly Ser Thr Pro Leu Gly Arg
 50 55 60
 Pro Ser Leu Cys Leu Pro Pro Thr Ser His Thr Ala Cys Pro Leu Pro
 65 70 75 80
 Gly Thr Cys His Ile Pro Gly Asn Ile Gly Ile Cys Gly Ala Tyr Gly
 85 90 95
 Lys Asn Thr Leu Asn Gly His Glu Lys Glu Thr Met Lys Phe Leu Asn
 100 105 110
 Asp Arg Leu Ala Asn Tyr Leu Glu Lys Val Arg Gln Leu Glu Gln Glu
 115 120 125

Asn	Ala	Glu	Leu	Glu	Thr	Thr	Leu	Leu	Glu	Arg	Ser	Lys	Cys	His	Glu
130							135				140				
Ser	Thr	Val	Cys	Pro	Asp	Tyr	Gln	Ser	Tyr	Phe	Arg	Thr	Ile	Glu	Glu
145					150					155					160
Leu	Gln	Gln	Lys	Ile	Leu	Cys	Ser	Lys	Ala	Glu	Asn	Ala	Arg	Leu	Ile
				165					170						175
Val	Gln	Ile	Asp	Asn	Ala	Lys	Leu	Ala	Ala	Asp	Asp	Phe	Arg	Ile	Lys
			180					185					190		
Leu	Glu	Ser	Glu	Arg	Ser	Leu	His	Gln	Leu	Val	Glu	Ala	Asp	Lys	Cys
		195				200						205			
Gly	Thr	Gln	Lys	Leu	Leu	Asp	Asp	Ala	Thr	Leu	Ala	Lys	Ala	Asp	Leu
210						215						220			
Glu	Ala	Gln	Gln	Glu	Ser	Leu	Lys	Glu	Glu	Gln	Leu	Ser	Leu	Lys	Ser
225					230					235					240
Asn	His	Glu	Gln	Glu	Val	Lys	Ile	Leu	Arg	Ser	Gln	Leu	Gly	Glu	Lys
				245					250					255	
Phe	Arg	Ile	Glu	Leu	Asp	Ile	Glu	Pro	Thr	Ile	Asp	Leu	Asn	Arg	Val
		260						265					270		
Leu	Gly	Glu	Met	Arg	Ala	Gln	Tyr	Glu	Ala	Met	Val	Glu	Thr	Asn	His
	275						280					285			
Gln	Asp	Val	Glu	Gln	Trp	Phe	Gln	Ala	Gln	Ser	Glu	Gly	Ile	Ser	Leu
290						295					300				
Gln	Ala	Met	Ser	Cys	Ser	Glu	Glu	Leu	Gln	Cys	Cys	Gln	Ser	Glu	Ile
305					310					315					320
Leu	Glu	Leu	Arg	Cys	Thr	Val	Asn	Ala	Leu	Glu	Val	Glu	Arg	Gln	Ala
			325					330						335	
Gln	His	Thr	Leu	Lys	Asp	Cys	Leu	Gln	Asn	Ser	Leu	Cys	Glu	Ala	Glu
		340						345					350		
Asp	Arg	Tyr	Gly	Thr	Glu	Leu	Ala	Gln	Met	Gln	Ser	Leu	Ile	Ser	Asn
	355						360					365			
Leu	Glu	Glu	Gln	Leu	Ser	Glu	Ile	Arg	Ala	Asp	Leu	Glu	Arg	Gln	Asn
370						375					380				
Gln	Glu	Tyr	Gln	Val	Leu	Leu	Asp	Val	Lys	Ala	Arg	Leu	Glu	Asn	Glu
385					390					395					400
Ile	Ala	Thr	Tyr	Arg	Asn	Leu	Thr	Pro	Leu	Gln	Ser	Leu	Phe	His	Ala
			405						410					415	
Cys	Leu	Leu	Tyr	Phe	Leu	Ser	Lys	Leu	Trp	Pro	Cys	His	Arg	Trp	Val
		420						425					430		
Ser	Leu	Trp	Pro	Trp	Ser	Gln	His	Gly	Glu	Met	Ile	Leu	Lys	Ala	Arg
	435					440					445				
Val	Arg	Arg	Leu	Arg	Leu	Val	Ala	Leu	Gly	Ser	Gly	Val	Pro	Ser	Pro
450					455						460				
Cys	Pro	Val	Phe	Leu	Gln	Asp	*								
465					470	471									

<210> 1691

<211> 119

<212> PRT

<213> Homo sapiens

<400> 1691

Met	Ser	Cys	Gln	Gln	Ser	Gln	Gln	Gln	Cys	Gln	Pro	Pro	Pro	Lys	Cys
1				5					10					15	
Thr	Pro	Lys	Cys	Pro	Pro	Lys	Cys	Thr	Pro	Lys	Cys	Pro	Pro	Lys	Cys
			20					25					30		
Pro	Pro	Lys	Cys	Pro	Pro	Gln	Tyr	Ser	Ala	Pro	Cys	Pro	Pro	Pro	Val
		35					40				45				
Ser	Ser	Cys	Cys	Gly	Ser	Ser	Ser	Gly	Gly	Cys	Cys	Ser	Ser	Glu	Gly
	50					55				60					
Gly	Gly	Cys	Cys	Leu	Ser	His	His	Arg	Pro	Arg	Gln	Ser	Leu	Arg	Arg
65					70					75					80

Arg Pro Gln Ser Ser Ser Cys Cys Gly Ser Gly Ser Gly Gln Gln Ser
 85 90 95
 Gly Gly Ser Ser Cys Cys His Ser Ser Gly Gly Ser Gly Cys Cys His
 100 105 110
 Ser Ser Gly Gly Cys Cys *
 115 118

<210> 1692
 <211> 181
 <212> PRT
 <213> Homo sapiens

<400> 1692
 Met Lys Trp Val Gln Phe Ser Asn Leu His Val Asp Val Pro Lys Asp
 1 5 10 15
 Leu Thr Lys Pro Val Val Thr Ile Ser Asp Glu Pro Asp Ile Leu Tyr
 20 25 30
 Lys Arg Leu Ser Val Leu Val Lys Gly His Asp Lys Ala Val Leu Asp
 35 40 45
 Ser Tyr Glu Tyr Phe Ala Val Leu Ala Ala Lys Glu Leu Gly Ile Ser
 50 55 60
 Ile Lys Val His Glu Pro Pro Arg Lys Ile Glu Arg Phe Thr Leu Leu
 65 70 75 80
 Gln Ser Val His Ile Tyr Lys Lys His Arg Val Gln Tyr Glu Met Arg
 85 90 95
 Thr Leu Tyr Arg Cys Leu Glu Leu Glu His Leu Thr Gly Ser Thr Ala
 100 105 110
 Asp Val Tyr Leu Glu Tyr Ile Gln Arg Asn Leu Pro Glu Gly Val Ala
 115 120 125
 Met Glu Val Thr Lys Phe Cys Phe Phe Ile Phe Leu Asp Thr Ile Arg
 130 135 140
 Thr Val Thr Arg Thr His Gln Gly Ala Asn Leu Gly Asn Thr Ile Arg
 145 150 155 160
 Arg Lys Arg Arg Lys Gln Val Ile Lys Pro Gln Gly Gly His Phe Cys
 165 170 175
 Leu Asn Leu Lys *
 180

<210> 1693
 <211> 106
 <212> PRT
 <213> Homo sapiens

<400> 1693
 Met Ser Cys Gln Gln Asn Gln Gln Gln Cys Gln Pro Pro Pro Lys Cys
 1 5 10 15
 Pro Ile Pro Lys Tyr Pro Pro Lys Cys Pro Ser Lys Cys Ala Ser Ser
 20 25 30
 Cys Pro Pro Pro Ile Ser Ser Cys Cys Gly Ser Ser Ser Gly Gly Cys
 35 40 45
 Cys Ser Ser Gly Gly Cys Gly Cys Cys Ser Ser Glu Gly Gly Gly Cys
 50 55 60
 Cys Leu Ser His His Arg His His Arg Ser His Cys His Arg Pro Lys
 65 70 75 80
 Ser Ser Asn Cys Tyr Gly Ser Gly Ser Gly Gln Gln Ser Gly Gly Ser
 85 90 95
 Gly Cys Cys Ser Gly Gly Gly Cys Cys *
 100 105

<210> 1694
 <211> 347
 <212> PRT
 <213> Homo sapiens

<400> 1694
 Met Leu Lys Lys Pro Leu Ser Ala Val Thr Trp Leu Cys Ile Phe Ile
 1 5 10 15
 Val Ala Phe Val Ser His Pro Ala Trp Leu Gln Lys Leu Ser Lys His
 20 25 30
 Lys Thr Pro Ala Gln Pro Gln Leu Lys Ala Ala Asn Cys Cys Glu Glu
 35 40 45
 Val Lys Glu Leu Lys Ala Gln Val Ala Asn Leu Ser Ser Leu Leu Ser
 50 55 60
 Glu Leu Asn Lys Lys Gln Glu Arg Asp Trp Val Ser Val Val Met Gln
 65 70 75 80
 Val Met Glu Leu Glu Ser Asn Ser Lys Arg Met Glu Ser Arg Leu Thr
 85 90 95
 Asp Ala Glu Ser Lys Tyr Ser Glu Met Asn Asn Gln Ile Asp Ile Met
 100 105 110
 Gln Leu Gln Ala Ala Gln Thr Val Thr Gln Thr Ser Ala Asp Ala Ile
 115 120 125
 Tyr Asp Cys Ser Ser Leu Tyr Gln Lys Asn Tyr Arg Ile Ser Gly Val
 130 135 140
 Tyr Lys Leu Pro Pro Asp Asp Phe Leu Gly Ser Pro Glu Leu Glu Val
 145 150 155 160
 Phe Cys Asp Met Glu Thr Ser Gly Gly Gly Trp Thr Ile Ile Gln Arg
 165 170 175
 Arg Lys Ser Gly Leu Val Ser Phe Tyr Arg Asp Trp Lys Gln Tyr Lys
 180 185 190
 Gln Gly Phe Gly Ser Ile Arg Gly Asp Phe Trp Leu Gly Asn Glu His
 195 200 205
 Ile His Arg Leu Ser Arg Gln Pro Thr Arg Leu Arg Val Glu Met Glu
 210 215 220
 Asp Trp Glu Gly Asn Leu Arg Tyr Ala Glu Tyr Ser His Phe Val Leu
 225 230 235 240
 Gly Asn Glu Leu Asn Ser Tyr Arg Leu Phe Leu Gly Asn Tyr Thr Gly
 245 250 255
 Asn Val Gly Asn Asp Ala Leu Gln Tyr His Asn Asn Thr Ala Phe Ser
 260 265 270
 Thr Lys Asp Lys Asp Asn Asp Asn Cys Leu Asp Lys Cys Ala Gln Leu
 275 280 285
 Arg Lys Gly Gly Tyr Trp Tyr Asn Cys Cys Thr Asp Ser Asn Leu Asn
 290 295 300
 Gly Val Tyr Tyr Arg Leu Gly Glu His Asn Lys His Leu Asp Gly Ile
 305 310 315 320
 Thr Trp Tyr Gly Trp His Gly Ser Thr Tyr Ser Leu Lys Arg Val Glu
 325 330 335
 Met Lys Ile Arg Pro Glu Asp Phe Lys Pro *
 340 345 346

<210> 1695
 <211> 455
 <212> PRT
 <213> Homo sapiens

<400> 1695

Met	Tyr	Asn	Thr	Val	Trp	Asn	Met	Glu	Asp	Leu	Asp	Leu	Glu	Tyr	Ala
1				5					10					15	
Lys	Thr	Asp	Ile	Asn	Cys	Gly	Thr	Asp	Leu	Met	Phe	Tyr	Ile	Glu	Met
			20					25					30		
Asp	Pro	Pro	Ala	Leu	Pro	Pro	Lys	Pro	Pro	Lys	Pro	Thr	Thr	Val	Ala
			35				40					45			
Asn	Asn	Gly	Met	Asn	Asn	Asn	Met	Ser	Leu	Gln	Asp	Ala	Glu	Trp	Tyr
			50				55				60				
Trp	Gly	Asp	Ile	Ser	Arg	Glu	Glu	Val	Asn	Glu	Lys	Leu	Arg	Asp	Thr
					70					75					80
Ala	Asp	Gly	Thr	Phe	Leu	Val	Arg	Asp	Ala	Ser	Thr	Lys	Met	His	Gly
				85					90					95	
Asp	Tyr	Thr	Leu	Thr	Leu	Arg	Lys	Gly	Gly	Asn	Asn	Lys	Leu	Ile	Lys
			100					105					110		
Ile	Phe	His	Arg	Asp	Gly	Lys	Tyr	Gly	Phe	Ser	Asp	Pro	Leu	Thr	Phe
		115				120					125				
Ser	Ser	Val	Val	Glu	Leu	Ile	Asn	His	Tyr	Arg	Asn	Glu	Ser	Leu	Ala
		130				135					140				
Gln	Tyr	Asn	Pro	Lys	Leu	Asp	Val	Lys	Leu	Leu	Tyr	Pro	Val	Ser	Lys
				150						155					160
Tyr	Gln	Gln	Asp	Gln	Val	Val	Lys	Glu	Asp	Asn	Ile	Glu	Ala	Val	Gly
				165					170					175	
Lys	Lys	Leu	His	Glu	Tyr	Asn	Thr	Gln	Phe	Gln	Glu	Lys	Ser	Arg	Glu
			180					185					190		
Tyr	Asp	Arg	Leu	Tyr	Glu	Glu	Tyr	Thr	Arg	Thr	Ser	Gln	Glu	Ile	Gln
		195					200					205			
Met	Lys	Arg	Thr	Ala	Ile	Glu	Ala	Phe	Asn	Glu	Thr	Ile	Lys	Ile	Phe
						215					220				
Glu	Glu	Gln	Cys	Gln	Thr	Gln	Glu	Arg	Tyr	Ser	Lys	Glu	Tyr	Ile	Glu
				230						235					240
Lys	Phe	Lys	Arg	Glu	Gly	Asn	Glu	Lys	Glu	Ile	Gln	Arg	Ile	Met	His
				245					250					255	
Asn	Tyr	Asp	Lys	Leu	Lys	Ser	Arg	Ile	Ser	Glu	Ile	Ile	Asp	Ser	Arg
			260				265						270		
Arg	Arg	Leu	Glu	Glu	Asp	Leu	Lys	Lys	Gln	Ala	Ala	Glu	Tyr	Arg	Glu
			275				280					285			
Ile	Asp	Lys	Arg	Met	Asn	Ser	Ile	Lys	Pro	Asp	Leu	Ile	Gln	Leu	Arg
			290			295					300				
Lys	Thr	Arg	Asp	Gln	Tyr	Leu	Met	Trp	Leu	Thr	Gln	Lys	Gly	Val	Arg
				310						315					320
Gln	Lys	Lys	Leu	Asn	Glu	Trp	Leu	Gly	Asn	Glu	Asn	Thr	Glu	Asp	Gln
				325					330					335	
Tyr	Ser	Leu	Val	Glu	Asp	Asp	Glu	Asp	Leu	Pro	His	His	Asp	Glu	Lys
			340				345						350		
Thr	Trp	Asn	Val	Gly	Ser	Ser	Asn	Arg	Asn	Lys	Ala	Glu	Asn	Leu	Leu
			355				360					365			
Arg	Gly	Lys	Arg	Asp	Gly	Thr	Phe	Leu	Val	Arg	Glu	Ser	Ser	Lys	Gln
			370			375					380				
Gly	Cys	Tyr	Ala	Cys	Ser	Val	Val	Val	Asp	Gly	Glu	Val	Lys	His	Cys
				390						395					400
Val	Ile	Asn	Lys	Thr	Ala	Thr	Gly	Tyr	Gly	Phe	Ala	Glu	Pro	Tyr	Asn
				405					410					415	
Leu	Tyr	Ser	Ser	Leu	Lys	Glu	Leu	Val	Leu	His	Tyr	Gln	His	Thr	Ser
			420				425					430			
Leu	Val	Gln	His	Asn	Asp	Ser	Leu	Asn	Val	Thr	Leu	Ala	Tyr	Pro	Val
			435				440					445			
Tyr	Ala	Gln	Gln	Arg	Arg	*									
			450			454									

<210> 1696

<211> 46

<212> PRT

<213> Homo sapiens

<400> 1696

Met	Leu	Asp	Leu	Gly	Ala	Ala	Lys	Ala	Asn	Leu	Glu	Lys	Ala	Gln	Ala
1				5					10					15	
Glu	Leu	Val	Gly	Thr	Ala	Asp	Glu	Ala	Thr	Arg	Ala	Glu	Ile	Gln	Ile
			20					25					30		
Arg	Ile	Glu	Ala	Asn	Glu	Ala	Leu	Val	Lys	Ala	Leu	Glu	*		
		35					40					45			

<210> 1697

<211> 367

<212> PRT

<213> Homo sapiens

<400> 1697

Met	Ala	Pro	Asn	Leu	Lys	Gly	Arg	Pro	Arg	Lys	Lys	Lys	Pro	Cys	Pro
1				5					10					15	
Gln	Arg	Arg	Asp	Ser	Phe	Ser	Gly	Val	Lys	Asp	Ser	Asn	Asn	Asn	Ser
			20					25					30		
Asp	Gly	Lys	Ala	Val	Ala	Lys	Val	Lys	Cys	Glu	Ala	Arg	Ser	Ala	Leu
		35					40					45			
Thr	Lys	Pro	Lys	Asn	Asn	His	Asn	Cys	Lys	Lys	Val	Ser	Asn	Glu	Glu
	50					55					60				
Lys	Pro	Lys	Val	Ala	Ile	Gly	Glu	Glu	Cys	Arg	Ala	Asp	Glu	Gln	Ala
	65				70					75					80
Phe	Leu	Val	Ala	Leu	Tyr	Lys	Tyr	Met	Lys	Glu	Arg	Lys	Thr	Pro	Ile
			85						90					95	
Glu	Arg	Ile	Pro	Tyr	Leu	Gly	Phe	Lys	Gln	Ile	Asn	Leu	Trp	Thr	Met
			100					105					110		
Phe	Gln	Ala	Ala	Gln	Lys	Leu	Gly	Gly	Tyr	Glu	Thr	Ile	Thr	Ala	Arg
	115						120					125			
Arg	Gln	Trp	Lys	His	Ile	Tyr	Asp	Glu	Leu	Gly	Gly	Asn	Pro	Gly	Ser
	130					135						140			
Thr	Ser	Ala	Ala	Thr	Cys	Thr	Arg	Arg	His	Tyr	Glu	Arg	Leu	Ile	Leu
	145				150					155					160
Pro	Tyr	Glu	Arg	Phe	Ile	Lys	Gly	Glu	Glu	Asp	Lys	Pro	Leu	Pro	Pro
			165					170					175		
Ile	Lys	Pro	Arg	Lys	Gln	Glu	Asn	Ser	Ser	Gln	Glu	Asn	Glu	Asn	Lys
		180						185					190		
Thr	Lys	Val	Ser	Gly	Thr	Lys	Arg	Ile	Lys	His	Glu	Ile	Pro	Lys	Ser
	195						200					205			
Lys	Lys	Glu	Lys	Glu	Asn	Ala	Pro	Lys	Pro	Gln	Asp	Ala	Ala	Glu	Val
	210					215					220				
Ser	Ser	Glu	Gln	Glu	Lys	Glu	Gln	Glu	Thr	Leu	Ile	Ser	Gln	Lys	Ser
	225					230				235					240
Ile	Pro	Glu	Pro	Leu	Pro	Ala	Ala	Asp	Met	Lys	Lys	Lys	Ile	Glu	Gly
			245					250						255	
Tyr	Gln	Glu	Phe	Ser	Ala	Lys	Pro	Leu	Ala	Ser	Arg	Val	Asp	Pro	Glu
		260						265					270		
Lys	Asp	Asn	Glu	Thr	Asp	Gln	Gly	Ser	Asn	Ser	Glu	Lys	Val	Ala	Glu
	275						280					285			
Glu	Ala	Gly	Glu	Lys	Gly	Pro	Thr	Pro	Pro	Leu	Pro	Ser	Ala	Pro	Leu
	290					295						300			
Ala	Pro	Glu	Lys	Asp	Ser	Ala	Leu	Val	Pro	Gly	Ala	Ser	Lys	Gln	Pro
	305					310				315					320
Leu	Thr	Ser	Pro	Ser	Ala	Leu	Val	Asp	Ser	Lys	Gln	Glu	Ser	Lys	Leu
			325					330						335	
Cys	Cys	Phe	Thr	Glu	Ser	Pro	Glu	Ser	Glu	Pro	Gln	Glu	Ala	Ser	Phe
			340					345					350		

Pro Ser Phe Pro Thr Thr Gln Ala Thr Ala Gly Lys Pro Glu *
 355 360 365 366

<210> 1698
 <211> 456
 <212> PRT
 <213> Homo sapiens

<400> 1698
 Met Cys Thr Lys Thr Ile Pro Val Leu Trp Gly Cys Phe Leu Leu Trp
 1 5 10 15
 Asn Leu Tyr Val Ser Ser Ser Gln Thr Ile Tyr Pro Gly Ile Lys Ala
 20 25 30
 Arg Ile Thr Gln Arg Ala Leu Asp Tyr Gly Val Gln Ala Gly Met Lys
 35 40 45
 Met Ile Glu Gln Met Leu Lys Glu Lys Lys Leu Pro Asp Leu Ser Gly
 50 55 60
 Ser Glu Ser Leu Glu Phe Leu Lys Val Asp Tyr Val Asn Tyr Asn Phe
 65 70 75 80
 Ser Asn Ile Lys Ile Ser Ala Phe Ser Phe Pro Asn Thr Ser Leu Ala
 85 90 95
 Phe Val Pro Gly Val Gly Ile Lys Ala Leu Thr Asn His Gly Thr Ala
 100 105 110
 Asn Ile Ser Thr Asp Trp Gly Phe Glu Ser Pro Leu Phe Val Leu Tyr
 115 120 125
 Asn Ser Phe Ala Glu Pro Met Glu Lys Pro Ile Leu Lys Asn Leu Asn
 130 135 140
 Glu Met Leu Cys Pro Ile Ile Ala Ser Glu Val Lys Ala Leu Asn Ala
 145 150 155 160
 Asn Leu Ser Thr Leu Glu Val Leu Thr Lys Ile Asp Asn Tyr Thr Leu
 165 170 175
 Leu Asp Tyr Ser Leu Ile Ser Ser Pro Glu Ile Thr Glu Asn Tyr Leu
 180 185 190
 Asp Leu Asn Leu Lys Gly Val Phe Tyr Pro Leu Glu Asn Leu Thr Asp
 195 200 205
 Pro Pro Phe Ser Pro Val Pro Phe Val Leu Pro Glu Arg Ser Asn Ser
 210 215 220
 Met Leu Tyr Ile Gly Ile Ala Glu Tyr Phe Phe Lys Ser Ala Ser Phe
 225 230 235 240
 Ala His Phe Thr Ala Gly Val Phe Asn Val Thr Leu Ser Thr Glu Glu
 245 250 255
 Ile Ser Asn His Phe Val Gln Asn Ser Gln Gly Leu Gly Asn Val Leu
 260 265 270
 Ser Arg Ile Ala Glu Ile Tyr Ile Leu Ser Gln Pro Phe Met Val Arg
 275 280 285
 Ile Met Ala Thr Glu Pro Pro Ile Ile Asn Leu Gln Pro Gly Asn Phe
 290 295 300
 Thr Leu Asp Ile Pro Ala Ser Ile Met Met Leu Thr Gln Pro Lys Asn
 305 310 315 320
 Ser Thr Val Glu Thr Ile Val Ser Met Asp Phe Val Ala Ser Thr Ser
 325 330 335
 Val Gly Leu Val Ile Leu Gly Gln Arg Leu Val Cys Ser Leu Ser Leu
 340 345 350
 Asn Arg Phe Arg Leu Ala Leu Pro Glu Ser Asn Arg Ser Asn Ile Glu
 355 360 365
 Val Leu Arg Phe Glu Asn Ile Leu Ser Ser Ile Leu His Phe Gly Val
 370 375 380
 Leu Pro Leu Ala Asn Ala Lys Leu Gln Gln Gly Phe Pro Leu Pro Asn
 385 390 395 400
 Pro His Lys Phe Leu Phe Val Asn Ser Asp Ile Glu Val Leu Glu Gly
 405 410 415

Phe Leu Leu Ile Ser Thr Asp Leu Lys Tyr Glu Thr Ser Ser Lys Gln
 420 425 430
 Gln Pro Ser Phe His Val Trp Glu Gly Leu Asn Leu Ile Ser Arg Gln
 435 440 445
 Trp Arg Gly Lys Ser Ala Pro *
 450 455

<210> 1699
 <211> 98
 <212> PRT
 <213> Homo sapiens

<400> 1699
 Met Thr Gly Lys Thr Thr Lys Val Pro Asn Ala Cys Leu Phe Thr Ile
 1 5 10 15
 Asn Lys Glu Asp His Thr Leu Gly Asn Ile Ile Lys Ser Gln Leu Leu
 20 25 30
 Lys Asp Pro Gln Val Leu Phe Ala Gly Tyr Lys Val Pro His Pro Leu
 35 40 45
 Glu His Lys Ile Ile Ile Arg Val Gln Thr Thr Pro Asp Tyr Ser Pro
 50 55 60
 Gln Glu Ala Phe Thr Asn Ala Ile Thr Asp Leu Ile Ser Glu Leu Ser
 65 70 75 80
 Leu Leu Glu Glu Arg Phe Arg Thr Cys Leu Leu Pro Leu Arg Leu Leu
 85 90 95
 Pro *
 97

<210> 1700
 <211> 111
 <212> PRT
 <213> Homo sapiens

<400> 1700
 Met Asn Lys Ser Gln Glu Gln Val Ser Phe Lys Asp Val Cys Val Asp
 1 5 10 15
 Phe Thr Gln Glu Glu Trp Tyr Leu Leu Asp Pro Ala Gln Lys Ile Leu
 20 25 30
 Tyr Arg Asp Val Ile Leu Glu Asn Tyr Ser Asn Leu Val Ser Val Gly
 35 40 45
 Tyr Cys Ile Thr Lys Pro Glu Val Ile Phe Lys Ile Glu Gln Gly Glu
 50 55 60
 Glu Pro Trp Ile Leu Glu Lys Gly Phe Pro Ser Gln Cys Gln Pro Glu
 65 70 75 80
 Arg Glu Trp Glu Val Asp Asp Val Leu Glu Ser Ser Gln Glu His Glu
 85 90 95
 Asp Asp Pro Phe Trp Glu Leu Leu Phe Pro Asn Asn Lys Gln *
 100 105 110

<210> 1701
 <211> 300
 <212> PRT
 <213> Homo sapiens

<400> 1701


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Met Ala Pro Ser Leu Leu Cys Pro Phe Thr Ala Met His Lys Thr Val
 1          5          10          15
Gly Arg Ala Ser Cys Ala Pro Pro Ser Trp Arg Met Glu Leu Arg Ser
          20          25          30
Gly Ser Val Gly Ser Gln Ala Val Ala Arg Arg Met Asp Gly Asp Ser
          35          40          45
Arg Asp Gly Gly Gly Gly Lys Asp Ala Thr Gly Ser Glu Asp Tyr Glu
          50          55          60
Asn Leu Pro Thr Ser Ala Ser Val Ser Thr His Met Thr Ala Gly Ala
          65          70          75          80
Met Ala Gly Ile Leu Glu His Ser Val Met Tyr Pro Val Asp Ser Val
          85          90          95
Lys Thr Arg Met Gln Ser Leu Ser Pro Asp Pro Lys Ala Gln Tyr Thr
          100          105          110
Ser Val Tyr Gly Ala Leu Lys Lys Ile Met Arg Thr Glu Gly Phe Trp
          115          120          125
Arg Pro Leu Arg Gly Val Asn Val Met Ile Met Gly Ala Gly Pro Ala
          130          135          140
His Ala Met Tyr Phe Ala Cys Tyr Glu Asn Met Lys Arg Thr Leu Asn
          145          150          155          160
Asp Val Phe His His Gln Gly Asn Ser His Leu Ala Asn Gly Ile Ala
          165          170          175
Gly Ser Met Ala Thr Leu Leu His Asp Ala Val Met Asn Pro Ala Glu
          180          185          190
Val Val Lys Gln Arg Leu Gln Met Tyr Asn Ser Gln His Arg Ser Ala
          195          200          205
Ile Ser Cys Ile Arg Thr Val Trp Arg Thr Glu Gly Leu Gly Ala Phe
          210          215          220
Tyr Arg Ser Tyr Thr Thr Gln Leu Thr Met Asn Ile Pro Phe Gln Ser
          225          230          235          240
Ile His Phe Ile Thr Tyr Glu Phe Leu Gln Glu Gln Val Asn Pro His
          245          250          255
Arg Thr Tyr Asn Pro Gln Ser His Ile Ile Ser Gly Gly Leu Ala Gly
          260          265          270
Ala Leu Ala Ala Ala Ala Asn Ser Asp Pro Arg Glu Ile Ser Phe Phe
          275          280          285
Gly Phe Gly Gly Val Ser Ser Ser Ser Asn Arg *
          290          295          299

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<210> 1702
 <211> 38
 <212> PRT
 <213> Homo sapiens

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<400> 1702
Met Val Leu Leu Leu Ser Leu Thr Phe Phe Ser Ala Leu Thr Phe His
 1          5          10          15
Ser Ile Cys Gln Leu Arg Asn Thr Gly Val Glu Val Asp Ile Val Phe
          20          25          30
Gln Arg Val Ser Phe Leu
          35          38

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<210> 1703
 <211> 140
 <212> PRT
 <213> Homo sapiens

<400> 1703

Met	Ser	Ser	Leu	Pro	Val	Pro	Tyr	Lys	Leu	Pro	Val	Ser	Leu	Ser	Val
1				5					10					15	
Gly	Ser	Cys	Val	Ile	Ile	Lys	Gly	Thr	Pro	Ile	His	Ser	Phe	Ile	Asn
			20					25					30		
Asp	Pro	Gln	Leu	Gln	Val	Asp	Phe	Tyr	Thr	Asp	Met	Asp	Glu	Asp	Ser
		35					40					45			
Asp	Ile	Ala	Phe	Arg	Phe	Arg	Val	His	Phe	Gly	Asn	His	Val	Val	Met
	50					55					60				
Asn	Arg	Arg	Glu	Phe	Gly	Ile	Trp	Met	Leu	Glu	Glu	Thr	Thr	Asp	Tyr
65					70					75				80	
Val	Pro	Phe	Glu	Asp	Gly	Lys	Gln	Phe	Glu	Leu	Cys	Ile	Tyr	Val	His
				85					90					95	
Tyr	Asn	Glu	Tyr	Glu	Ile	Lys	Val	Asn	Gly	Ile	Arg	Ile	Tyr	Gly	Phe
		100						105					110		
Val	His	Arg	Ile	Pro	Pro	Ser	Phe	Val	Lys	Met	Val	Gln	Val	Ser	Arg
		115					120					125			
Asp	Ile	Ser	Leu	Thr	Ser	Val	Cys	Val	Cys	Asn	*				
	130					135				139					

<210> 1704

<211> 380

<212> PRT

<213> Homo sapiens

<400> 1704

Met	Ser	Ser	Pro	Ser	Leu	Ser	Asp	Leu	Gly	Lys	Arg	Glu	Pro	Ala	Ala
1				5					10					15	
Ala	Ala	Asp	Glu	Arg	Gly	Thr	Gln	Gln	Arg	Arg	Ala	Cys	Ala	Asn	Ala
			20					25					30		
Thr	Trp	Asn	Ser	Ile	His	Asn	Gly	Val	Ile	Ala	Val	Phe	Gln	Arg	Lys
		35					40					45			
Gly	Leu	Pro	Asp	Gln	Glu	Leu	Phe	Ser	Leu	Asn	Glu	Gly	Val	Arg	Gln
	50					55				60					
Leu	Leu	Lys	Thr	Glu	Leu	Gly	Ser	Phe	Phe	Thr	Glu	Tyr	Leu	Gln	Asn
65					70					75				80	
Gln	Leu	Leu	Thr	Lys	Gly	Met	Val	Ile	Leu	Arg	Asp	Lys	Ile	Arg	Phe
				85				90						95	
Tyr	Glu	Gly	Gln	Lys	Leu	Leu	Asp	Ser	Leu	Ala	Glu	Thr	Trp	Asp	Phe
			100				105						110		
Phe	Phe	Ser	Asp	Val	Leu	Pro	Met	Leu	Gln	Ala	Ile	Phe	Tyr	Pro	Val
		115					120					125			
Gln	Gly	Lys	Glu	Pro	Ser	Val	Arg	Gln	Leu	Ala	Leu	Leu	His	Phe	Arg
	130					135				140					
Asn	Ala	Ile	Thr	Leu	Ser	Val	Lys	Leu	Glu	Asp	Ala	Leu	Ala	Arg	Ala
145					150					155				160	
His	Ala	Arg	Val	Pro	Pro	Ala	Ile	Val	Gln	Met	Leu	Leu	Val	Leu	Gln
				165					170					175	
Gly	Val	His	Glu	Ser	Arg	Gly	Val	Thr	Glu	Asp	Tyr	Leu	Arg	Leu	Glu
			180					185					190		
Thr	Leu	Val	Gln	Lys	Val	Val	Ser	Pro	Tyr	Leu	Gly	Thr	Tyr	Gly	Leu
		195					200					205			
His	Ser	Ser	Glu	Gly	Pro	Phe	Thr	His	Ser	Cys	Ile	Leu	Glu	Lys	Arg
	210					215				220					
Leu	Leu	Arg	Arg	Ser	Arg	Ser	Gly	Asp	Val	Leu	Ala	Lys	Asn	Pro	Val
225					230					235				240	
Val	Arg	Ser	Lys	Ser	Tyr	Asn	Thr	Pro	Leu	Leu	Asn	Pro	Val	Gln	Glu
				245					250					255	
His	Glu	Ala	Glu	Gly	Ala	Ala	Ala	Gly	Gly	Thr	Ser	Ile	Arg	Arg	His
		260						265					270		
Ser	Val	Ser	Glu	Met	Thr	Ser	Cys	Pro	Glu	Pro	Gln	Gly	Phe	Ser	Asp
		275					280					285			

Pro	Pro	Gly	Gln	Gly	Pro	Thr	Gly	Thr	Phe	Arg	Ser	Ser	Pro	Ala	Pro
	290					295					300				
His	Ser	Gly	Pro	Cys	Pro	Ser	Arg	Leu	Tyr	Pro	Thr	Thr	Gln	Pro	Pro
305					310					315					320
Glu	Gln	Gly	Leu	Asp	Pro	Thr	Arg	Ser	Ser	Leu	Pro	Arg	Ser	Ser	Pro
				325					330					335	
Glu	Asn	Leu	Val	Asp	Gln	Ile	Leu	Glu	Ser	Val	Asp	Ser	Asp	Ser	Glu
			340					345					350		
Gly	Ile	Phe	Ile	Asp	Phe	Gly	Arg	Gly	Arg	Gly	Ser	Gly	Met	Ser	Asp
		355				360						365			
Leu	Glu	Gly	Ser	Gly	Gly	Arg	Gln	Ser	Val	Val	*				
	370					375				379					

<210> 1705
 <211> 209
 <212> PRT
 <213> Homo sapiens

<400> 1705

Met	Val	Phe	Tyr	Phe	Thr	Ser	Ser	Ser	Val	Asn	Ser	Ser	Ala	Tyr	Thr
1				5					10					15	
Ile	Tyr	Met	Gly	Lys	Asp	Lys	Tyr	Glu	Asn	Glu	Asp	Leu	Ile	Lys	His
			20					25					30		
Gly	Trp	Pro	Glu	Asp	Ile	Trp	Phe	His	Val	Asp	Lys	Leu	Ser	Ser	Ala
		35					40					45			
His	Val	Tyr	Leu	Arg	Leu	His	Lys	Gly	Glu	Asn	Ile	Glu	Asp	Ile	Pro
	50					55					60				
Lys	Glu	Val	Leu	Met	Asp	Cys	Ala	His	Leu	Val	Lys	Ala	Asn	Ser	Ile
65					70					75					80
Gln	Gly	Cys	Lys	Met	Asn	Asn	Val	Asn	Val	Val	Tyr	Thr	Pro	Trp	Ser
			85						90					95	
Asn	Leu	Lys	Lys	Thr	Ala	Asp	Met	Asp	Val	Gly	Gln	Ile	Gly	Phe	His
			100					105					110		
Arg	Gln	Lys	Asp	Val	Lys	Ile	Val	Thr	Val	Glu	Lys	Lys	Val	Asn	Glu
		115					120						125		
Ile	Leu	Asn	Arg	Leu	Glu	Lys	Thr	Lys	Val	Glu	Arg	Phe	Ser	Asp	Leu
	130					135					140				
Ala	Ala	Glu	Lys	Glu	Cys	Arg	Asp	Arg	Glu	Glu	Arg	Asn	Glu	Lys	Lys
145					150					155					160
Ala	Gln	Ile	Gln	Glu	Met	Lys	Lys	Arg	Glu	Lys	Glu	Glu	Met	Lys	Lys
				165						170				175	
Lys	Arg	Glu	Met	Asp	Glu	Leu	Arg	Ser	Tyr	Ser	Ser	Leu	Met	Lys	Val
			180					185					190		
Glu	Asn	Met	Ser	Ser	Asn	Gln	Asp	Gly	Asn	Asp	Ser	Asp	Glu	Phe	Met
		195					200					205			208

*

<210> 1706
 <211> 87
 <212> PRT
 <213> Homo sapiens

<400> 1706

Met	Val	Phe	Tyr	Phe	Thr	Ser	Ser	Ser	Val	Asn	Ser	Ser	Ala	Tyr	Thr
1				5					10					15	
Ile	Tyr	Met	Gly	Lys	Asp	Lys	Tyr	Glu	Asn	Glu	Asp	Leu	Ile	Lys	His
			20					25					30		

Gly Trp Pro Glu Asp Ile Trp Phe His Val Asp Lys Leu Ser Ser Ala
 35 40 45
 His Val Tyr Leu Arg Leu His Lys Gly Glu Asn Ile Glu Asp Ile Pro
 50 55 60
 Lys Glu Val Leu Met Asp Cys Ala His Leu Val Lys Ala Asn Ser Ile
 65 70 75 80
 Gln Gly Ala Ile His His *
 85 86

<210> 1707
 <211> 128
 <212> PRT
 <213> Homo sapiens

<400> 1707
 Met Arg Val His Ile Ser Ser Cys Leu Lys Val Gln Glu Gln Met Ala
 1 5 10 15
 Asn Cys Pro Lys Phe Val Pro Val Val Pro Thr Ser Gln Pro Ile Pro
 20 25 30
 Ser Asn Ile Pro Asn Arg Ser Thr Phe Ala Cys Pro Tyr Cys Gly Ala
 35 40 45
 Arg Asn Leu Asp Gln Gln Glu Leu Val Lys His Cys Val Glu Ser His
 50 55 60
 Arg Ser Asp Pro Asn Arg Val Val Cys Pro Ile Cys Ser Ala Met Pro
 65 70 75 80
 Trp Gly Asp Pro Ser Tyr Lys Ser Ala Asn Phe Leu Gln His Leu Leu
 85 90 95
 His Arg His Lys Phe Ser Tyr Asp Thr Phe Val Asp Tyr Ser Ile Asp
 100 105 110
 Glu Glu Ala Ala Phe Gln Ala Ala Leu Ala Leu Ser Leu Ser Glu Asn
 115 120 125 128

<210> 1708
 <211> 583
 <212> PRT
 <213> Homo sapiens

<400> 1708
 Met Ile Ser Arg Tyr Thr Arg Lys Ala Val Pro Gln Ser Leu Glu Leu
 1 5 10 15
 Lys Gly Ile Thr Lys His Ala Leu Asn His His Pro Pro Pro Glu Lys
 20 25 30
 Leu Glu Glu Ile Ser Pro Thr Ser Asp Ser His Glu Lys Asp Thr Ser
 35 40 45
 Ser Gln Ser Lys Ser Asp Ile Thr Arg Glu Ser Ser Phe Thr Ser Ala
 50 55 60
 Asp Thr Gly Asn Ser Leu Ser Ala Phe Pro Ser Tyr Thr Gly Ala Gly
 65 70 75 80
 Ile Ser Thr Glu Gly Ser Ser Asp Phe Ser Trp Gly Tyr Gly Glu Leu
 85 90 95
 Asp Gln Asn Ala Thr Glu Lys Val Gln Thr Met Phe Thr Ala Ile Asp
 100 105 110
 Glu Leu Leu Tyr Glu Gln Lys Leu Ser Val His Thr Lys Ser Leu Gln
 115 120 125
 Glu Glu Cys Gln Gln Trp Thr Ala Ser Phe Pro His Leu Arg Ile Leu
 130 135 140

Gly	Arg	Gln	Ile	Ile	Thr	Pro	Ser	Glu	Gly	Tyr	Arg	Leu	Tyr	Pro	Arg
145					150					155					160
Ser	Pro	Ser	Ala	Val	Ser	Ala	Ser	Tyr	Glu	Thr	Thr	Leu	Ser	Gln	Glu
				165					170					175	
Arg	Asp	Ser	Thr	Ile	Phe	Gly	Ile	Arg	Gly	Lys	Lys	Leu	His	Phe	Ser
			180					185					190		
Ser	Ser	Tyr	Ala	His	Lys	Ala	Ser	Ser	Ile	Ala	Lys	Ser	Ser	Ser	Phe
		195					200					205			
Cys	Ser	Met	Glu	Arg	Asp	Glu	Glu	Asp	Ser	Ile	Ile	Val	Ser	Glu	Gly
	210					215					220				
Ile	Ile	Glu	Glu	Tyr	Leu	Ala	Phe	Asp	His	Ile	Asp	Ile	Glu	Glu	Gly
225					230					235					240
Phe	His	Gly	Lys	Lys	Ser	Glu	Ala	Ala	Thr	Glu	Lys	Gln	Lys	Leu	Gly
			245						250					255	
Tyr	Pro	Pro	Ile	Ala	Pro	Phe	Tyr	Cys	Met	Lys	Glu	Asp	Val	Leu	Ala
			260					265					270		
Tyr	Val	Phe	Asp	Ser	Val	Trp	Cys	Lys	Val	Val	Ser	Cys	Met	Glu	Gln
		275					280					285			
Leu	Thr	Arg	Ser	His	Trp	Glu	Gly	Phe	Ala	Ser	Asp	Asp	Glu	Ser	Asn
	290					295					300				
Val	Ala	Val	Thr	Arg	Pro	Asp	Ser	Glu	Ser	Ser	Cys	Val	Leu	Ser	Glu
305					310					315					320
Leu	His	Pro	Leu	Val	Leu	Pro	Arg	Val	Pro	Gln	Ser	Lys	Val	Leu	Tyr
			325						330					335	
Ile	Thr	Ser	Asn	Pro	Met	Ser	Leu	Cys	Gln	Ala	Ser	Arg	His	Gln	Pro
		340						345					350		
Asn	Val	Asn	Asp	Leu	Leu	Val	His	Gly	Met	Pro	Leu	Gln	Pro	Arg	Asn
		355					360					365			
Leu	Ser	Leu	Met	Asp	Lys	Leu	Leu	Asp	Leu	Asp	Asp	Lys	Leu	Leu	Met
	370					375				380					
Arg	Pro	Gly	Ser	Ser	Thr	Ile	Leu	Ser	Thr	Arg	Asn	Trp	Pro	Asn	Arg
385					390					395					400
Ala	Val	Glu	Phe	Ser	Thr	Ser	Ser	Leu	Ser	Tyr	Thr	Val	Gln	Ser	Thr
			405						410					415	
Arg	Arg	Arg	Asn	Pro	Pro	Pro	Arg	Thr	Leu	His	Pro	Ile	Ser	Thr	Ser
			420					425					430		
His	Ser	Cys	Ala	Glu	Thr	Pro	Arg	Ser	Val	Glu	Glu	Ile	Leu	Arg	Gly
		435					440					445			
Ala	Arg	Val	Pro	Val	Ala	Pro	Asp	Ser	Leu	Ser	Ser	Pro	Ser	Pro	Thr
	450					455				460					
Pro	Leu	Ser	Arg	Asn	Asn	Leu	Leu	Pro	Pro	Ile	Gly	Thr	Ala	Glu	Val
465					470					475					480
Glu	His	Val	Ser	Thr	Val	Gly	Pro	Gln	Arg	Gln	Met	Lys	Pro	His	Gly
			485						490					495	
Asp	Ser	Ser	Arg	Ala	Gln	Ser	Ala	Val	Val	Asp	Glu	Pro	Asn	Tyr	Gln
			500					505					510		
Gln	Pro	Gln	Glu	Arg	Leu	Leu	Leu	Pro	Asp	Phe	Phe	Pro	Arg	Pro	Asn
		515					520					525			
Thr	Thr	Gln	Ser	Phe	Leu	Leu	Asp	Thr	Gln	Tyr	Arg	Arg	Ser	Cys	Ala
	530					535					540				
Val	Glu	Tyr	Pro	His	Gln	Ala	Arg	Pro	Gly	Arg	Gly	Ser	Ala	Gly	Pro
545					550					555					560
Gln	Leu	His	Gly	Ser	Thr	Lys	Ser	Gln	Ser	Gly	Gly	Arg	Pro	Val	Ser
			565						570					575	
Arg	Thr	Arg	Gln	Gly	Pro	*									
			580		582										

<210> 1709

<211> 171

<212> PRT

<213> Homo sapiens

<400> 1709

Met	Arg	Leu	Gln	Gly	Ala	Ile	Phe	Val	Leu	Leu	Pro	His	Leu	Gly	Pro
1				5					10					15	
Ile	Leu	Val	Trp	Leu	Phe	Thr	Arg	Asp	His	Met	Ser	Gly	Trp	Cys	Glu
			20					25					30		
Gly	Pro	Arg	Met	Leu	Ser	Trp	Cys	Pro	Phe	Tyr	Lys	Val	Leu	Leu	Leu
		35					40					45			
Val	Gln	Thr	Ala	Ile	Tyr	Ser	Val	Val	Gly	Tyr	Ala	Ser	Tyr	Leu	Val
		50				55					60				
Trp	Lys	Asp	Leu	Gly	Gly	Gly	Leu	Gly	Trp	Pro	Leu	Ala	Leu	Pro	Leu
65				70						75				80	
Gly	Leu	Tyr	Ala	Val	Gln	Leu	Thr	Ile	Ser	Trp	Thr	Val	Leu	Val	Leu
				85					90					95	
Phe	Phe	Thr	Val	His	Asn	Pro	Gly	Leu	Ala	Leu	Leu	His	Leu	Leu	Leu
			100					105					110		
Leu	Tyr	Gly	Leu	Val	Val	Ser	Thr	Ala	Leu	Ile	Trp	His	Pro	Ile	Asn
		115					120					125			
Lys	Leu	Ala	Ala	Leu	Leu	Leu	Leu	Pro	Tyr	Leu	Ala	Trp	Leu	Thr	Val
		130				135					140				
Thr	Ser	Ala	Leu	Thr	Tyr	His	Leu	Trp	Arg	Asp	Ser	Leu	Cys	Pro	Val
145					150					155					160
His	Gln	Pro	Gln	Pro	Thr	Glu	Lys	Ser	Asp	*					
				165					170						

<210> 1710

<211> 384

<212> PRT

<213> Homo sapiens

<400> 1710

Met	Asp	Ile	Pro	Arg	Ser	Val	Gln	Asn	Phe	Arg	Phe	Phe	Ala	Ser	Ser
1				5					10					15	
Ser	Leu	His	His	Thr	Ser	Glu	Cys	Thr	Gln	Met	Asp	His	Leu	Gly	Cys
			20					25					30		
Met	His	Tyr	Thr	Val	Arg	Ala	Pro	Gly	Gly	Val	Ala	Gly	Leu	Ile	Ser
		35					40					45			
Pro	Trp	Asn	Leu	Pro	Leu	Tyr	Leu	Leu	Thr	Trp	Lys	Ile	Ala	Pro	Ala
		50				55					60				
Met	Ala	Ala	Gly	Asn	Thr	Val	Ile	Ala	Lys	Pro	Ser	Glu	Leu	Thr	Ser
65				70						75				80	
Val	Thr	Ala	Trp	Met	Leu	Cys	Lys	Leu	Leu	Asp	Lys	Ala	Gly	Val	Pro
				85				90						95	
Pro	Gly	Val	Val	Asn	Ile	Val	Phe	Gly	Thr	Gly	Pro	Arg	Val	Gly	Glu
			100					105					110		
Ala	Leu	Val	Ser	His	Pro	Glu	Val	Pro	Leu	Ile	Ser	Phe	Thr	Gly	Ser
		115					120					125			
Gln	Pro	Thr	Ala	Glu	Arg	Ile	Thr	Gln	Leu	Ser	Ala	Pro	His	Cys	Lys
		130				135					140				
Lys	Leu	Ser	Leu	Glu	Leu	Gly	Gly	Lys	Asn	Pro	Ala	Ile	Ile	Phe	Glu
145				150					155					160	
Asp	Ala	Asn	Leu	Asp	Glu	Cys	Ile	Pro	Ala	Thr	Val	Arg	Ser	Ser	Phe
			165					170						175	
Ala	Asn	Gln	Gly	Glu	Ile	Cys	Leu	Cys	Thr	Ser	Arg	Ile	Phe	Val	Gln
		180						185					190		
Lys	Ser	Ile	Tyr	Ser	Glu	Phe	Leu	Lys	Arg	Phe	Val	Glu	Ala	Thr	Arg
		195					200					205			
Lys	Trp	Lys	Val	Gly	Ile	Pro	Ser	Asp	Pro	Leu	Val	Ser	Ile	Gly	Ala
	210				215						220				
Leu	Ile	Ser	Lys	Ala	His	Leu	Glu	Lys	Val	Arg	Ser	Tyr	Val	Lys	Arg
225					230					235					240

Ala	Leu	Ala	Glu	Gly	Ala	Gln	Ile	Trp	Cys	Gly	Glu	Gly	Val	Asp	Lys
				245					250					255	
Leu	Ser	Leu	Pro	Ala	Arg	Asn	Gln	Ala	Gly	Tyr	Phe	Met	Leu	Pro	Thr
			260					265					270		
Val	Ile	Thr	Asp	Ile	Lys	Asp	Glu	Ser	Cys	Cys	Met	Thr	Glu	Glu	Ile
		275					280					285			
Phe	Gly	Pro	Val	Thr	Cys	Val	Val	Pro	Phe	Asp	Ser	Glu	Glu	Glu	Val
	290					295					300				
Ile	Glu	Arg	Ala	Asn	Asn	Val	Lys	Tyr	Gly	Leu	Ala	Ala	Thr	Val	Trp
305					310					315					320
Ser	Ser	Asn	Val	Gly	Arg	Val	His	Arg	Val	Ala	Lys	Lys	Leu	Gln	Ser
			325						330					335	
Gly	Leu	Val	Trp	Thr	Asn	Cys	Trp	Leu	Ile	Arg	Glu	Leu	Asn	Leu	Pro
		340						345					350		
Phe	Gly	Gly	Met	Lys	Ser	Ser	Gly	Ile	Gly	Arg	Glu	Gly	Ala	Lys	Asp
	355						360					365			
Ser	Tyr	Asp	Phe	Phe	Thr	Glu	Ile	Lys	Thr	Ile	Thr	Val	Lys	His	*
	370					375					380			383	

<210> 1711

<211> 566

<212> PRT

<213> Homo sapiens

<400> 1711

Met	Gly	Arg	Asn	Gln	Ser	Arg	Lys	Ala	Glu	Asn	Ser	Lys	Asn	Gln	Ser
1				5					10					15	
Ala	Ser	Ser	Thr	Pro	Lys	Asp	His	Ser	Ala	Ser	Pro	Ala	Thr	Glu	Gln
			20					25					30		
Ser	Trp	Met	Gly	Asn	Asp	Phe	Asp	Glu	Leu	Thr	Glu	Leu	Gly	Phe	Arg
	35					40						45			
Lys	Ser	Val	Met	Thr	Asn	Phe	Ser	Gln	Leu	Lys	Glu	Asp	Val	Arg	Thr
	50				55						60				
His	His	Lys	Glu	Ala	Lys	Asn	Leu	Glu	Lys	Arg	Leu	Asp	Lys	Trp	Leu
65					70					75					80
Thr	Arg	Ile	Asn	Ser	Ile	Glu	Glu	Thr	Leu	Asn	Asp	Leu	Met	Glu	Leu
			85					90					95		
Lys	Thr	Met	Ala	Arg	Glu	Leu	Arg	Asp	Thr	Cys	Thr	Ser	Phe	Ser	Ser
		100						105					110		
Arg	Phe	Asp	Gln	Val	Glu	Glu	Gly	Glu	Ile	Gln	Thr	Thr	Ile	Arg	Glu
	115						120					125			
Tyr	Tyr	Glu	His	Leu	Tyr	Ala	Asn	Lys	Leu	Glu	Asn	Leu	Glu	Glu	Met
	130					135					140				
Asp	Lys	Phe	Leu	Asp	Thr	Tyr	Thr	Leu	Pro	Arg	Leu	Asn	Gln	Glu	Glu
145					150					155					160
Val	Glu	Ser	Leu	Asn	Arg	Pro	Ile	Thr	Gly	Ser	Glu	Ile	Glu	Ala	Ile
			165						170					175	
Ile	Asn	Ser	Leu	Pro	Thr	Lys	Lys	Ile	Pro	Gly	Pro	Asp	Arg	Phe	Thr
		180						185					190		
Ala	Lys	Phe	Tyr	Gln	Arg	Tyr	Lys	Glu	Glu	Leu	Ser	Asn	Leu	Ile	His
	195						200					205			
Tyr	Leu	Gly	Leu	Ser	His	His	Leu	Leu	Ala	Leu	Asn	Phe	Ile	Ile	Val
	210					215					220				
Ser	Phe	Gly	Lys	Lys	Ser	Ala	Trp	Ser	Ser	Ala	Gln	Val	Lys	Val	Thr
225					230					235					240
Asp	Thr	Asp	Phe	Asp	Gly	Val	Glu	Val	Arg	Val	Phe	Glu	Gly	Pro	Pro
			245						250					255	
Lys	Pro	Glu	Glu	Pro	Leu	Lys	Arg	Ser	Val	Val	Tyr	Ile	His	Gly	Gly
		260						265					270		
Gly	Trp	Ala	Leu	Ala	Ser	Ala	Lys	Ile	Arg	Tyr	Tyr	Asp	Glu	Leu	Cys
	275						280					285			

Thr Ala Met Ala Glu Glu Leu Asn Ala Val Ile Val Ser Ile Glu Tyr
 290 295 300
 Arg Leu Val Pro Lys Val Tyr Phe Pro Glu Gln Ile His Asp Val Val
 305 310 315 320
 Arg Ala Thr Lys Tyr Phe Leu Lys Pro Glu Val Leu Gln Lys Tyr Met
 325 330 335
 Val Asp Pro Gly Arg Ile Cys Ile Ser Gly Asp Ser Ala Gly Gly Asn
 340 345 350
 Leu Ala Ala Ala Leu Gly Gln Gln Phe Thr Gln Asp Ala Ser Leu Lys
 355 360 365
 Asn Lys Leu Lys Leu Gln Ala Leu Ile Tyr Pro Val Leu Gln Ala Leu
 370 375 380
 Asp Phe Asn Thr Pro Ser Tyr Gln Gln Asn Val Asn Thr Pro Ile Leu
 385 390 395 400
 Pro Arg Tyr Val Met Val Lys Tyr Trp Val Asp Tyr Phe Lys Gly Asn
 405 410 415
 Tyr Asp Phe Val Gln Ala Met Ile Val Asn Asn His Thr Ser Leu Asp
 420 425 430
 Val Glu Glu Ala Ala Ala Val Arg Ala Arg Leu Asn Trp Thr Ser Leu
 435 440 445
 Leu Pro Ala Ser Phe Thr Lys Asn Tyr Lys Pro Val Val Gln Thr Thr
 450 455 460
 Gly Asn Ala Arg Ile Val Gln Glu Leu Pro Gln Leu Leu Asp Ala Arg
 465 470 475 480
 Ser Ala Pro Leu Ile Ala Asp Gln Ala Val Leu Gln Leu Leu Pro Lys
 485 490 495
 Thr Tyr Ile Leu Thr Cys Glu His Asp Val Leu Arg Asp Asp Gly Ile
 500 505 510
 Met Tyr Ala Lys Arg Leu Glu Ser Ala Gly Val Glu Val Thr Leu Asp
 515 520 525
 His Phe Glu Asp Gly Phe His Gly Cys Met Ile Phe Thr Ser Trp Pro
 530 535 540
 Thr Asn Phe Ser Val Gly Ile Arg Thr Arg Asn Ser Tyr Ile Lys Trp
 545 550 555 560
 Leu Asp Gln Asn Leu *
 565

<210> 1712
 <211> 623
 <212> PRT
 <213> Homo sapiens

<400> 1712
 Met Arg Leu Leu Arg Arg Arg His Met Pro Leu Arg Leu Ala Met Val
 1 5 10 15
 Gly Cys Ala Phe Val Leu Phe Leu Phe Leu Leu His Arg Asp Val Ser
 20 25 30
 Ser Arg Glu Glu Ala Thr Glu Lys Pro Trp Leu Lys Ser Leu Val Ser
 35 40 45
 Arg Lys Asp His Val Leu Asp Leu Met Leu Glu Ala Met Asn Asn Leu
 50 55 60
 Arg Asp Ser Met Pro Lys Leu Gln Ile Arg Ala Pro Glu Ala Gln Gln
 65 70 75 80
 Thr Leu Phe Ser Ile Asn Gln Ser Cys Leu Pro Gly Phe Tyr Thr Pro
 85 90 95
 Ala Glu Leu Lys Pro Phe Trp Glu Arg Pro Pro Gln Asp Pro Asn Ala
 100 105 110
 Pro Gly Ala Asp Gly Lys Ala Phe Gln Lys Ser Lys Trp Thr Pro Leu
 115 120 125
 Glu Thr Gln Glu Lys Glu Glu Gly Tyr Lys Lys His Cys Phe Asn Ala
 130 135 140

Phe	Ala	Ser	Asp	Arg	Ile	Ser	Leu	Gln	Arg	Ser	Leu	Gly	Pro	Asp	Thr
145					150					155					160
Arg	Pro	Pro	Glu	Cys	Val	Asp	Gln	Lys	Phe	Arg	Arg	Cys	Pro	Pro	Leu
				165					170						175
Ala	Thr	Thr	Ser	Val	Ile	Ile	Val	Phe	His	Asn	Glu	Ala	Trp	Ser	Thr
			180					185							190
Leu	Leu	Arg	Thr	Val	Tyr	Ser	Val	Leu	His	Thr	Thr	Pro	Ala	Ile	Leu
		195					200					205			
Leu	Lys	Glu	Ile	Ile	Leu	Val	Asp	Asp	Ala	Ser	Thr	Glu	Glu	His	Leu
	210					215					220				
Lys	Glu	Lys	Leu	Glu	Gln	Tyr	Val	Lys	Gln	Leu	Gln	Val	Val	Arg	Val
225					230					235					240
Val	Arg	Gln	Glu	Glu	Arg	Lys	Gly	Leu	Ile	Thr	Ala	Arg	Leu	Leu	Gly
					245				250						255
Ala	Ser	Val	Ala	Gln	Ala	Glu	Val	Leu	Thr	Phe	Leu	Asp	Ala	His	Cys
			260					265					270		
Glu	Cys	Phe	His	Gly	Trp	Leu	Glu	Pro	Leu	Leu	Ala	Arg	Ile	Ala	Glu
		275					280						285		
Asp	Lys	Thr	Val	Val	Val	Ser	Pro	Asp	Ile	Val	Thr	Ile	Asp	Leu	Asn
	290					295					300				
Thr	Phe	Glu	Phe	Ala	Lys	Pro	Val	Gln	Arg	Gly	Arg	Val	His	Ser	Arg
305					310					315					320
Gly	Asn	Phe	Asp	Trp	Ser	Leu	Thr	Phe	Gly	Trp	Glu	Thr	Leu	Pro	Pro
				325					330						335
His	Glu	Lys	Gln	Arg	Arg	Lys	Asp	Glu	Thr	Tyr	Pro	Ile	Lys	Ser	Pro
			340					345					350		
Thr	Phe	Ala	Gly	Gly	Leu	Phe	Ser	Ile	Ser	Lys	Ser	Tyr	Phe	Glu	His
		355					360						365		
Ile	Gly	Thr	Tyr	Asp	Asn	Gln	Met	Glu	Ile	Trp	Gly	Gly	Glu	Asn	Val
	370					375					380				
Glu	Met	Ser	Phe	Arg	Val	Trp	Gln	Cys	Gly	Gly	Gln	Leu	Glu	Ile	Ile
385					390					395					400
Pro	Cys	Ser	Val	Val	Gly	His	Val	Phe	Arg	Thr	Lys	Ser	Pro	His	Thr
				405					410					415	
Phe	Pro	Lys	Gly	Thr	Ser	Val	Ile	Ala	Arg	Asn	Gln	Val	Arg	Leu	Ala
			420					425					430		
Glu	Val	Trp	Met	Asp	Ser	Tyr	Lys	Lys	Ile	Phe	Tyr	Arg	Arg	Asn	Leu
		435					440						445		
Gln	Ala	Ala	Lys	Met	Ala	Gln	Glu	Lys	Ser	Phe	Gly	Asp	Ile	Ser	Glu
	450					455						460			
Arg	Leu	Gln	Leu	Arg	Glu	Gln	Leu	His	Cys	His	Asn	Phe	Ser	Trp	Tyr
465					470					475					480
Leu	His	Asn	Val	Tyr	Pro	Glu	Met	Phe	Val	Pro	Asp	Leu	Thr	Pro	Thr
				485					490						495
Phe	Tyr	Gly	Ala	Ile	Lys	Asn	Leu	Gly	Thr	Asn	Gln	Cys	Leu	Asp	Val
		500						505					510		
Gly	Glu	Asn	Asn	Arg	Gly	Gly	Lys	Pro	Leu	Ile	Met	Tyr	Ser	Cys	His
		515					520						525		
Gly	Leu	Gly	Gly	Asn	Gln	Tyr	Phe	Glu	Tyr	Thr	Thr	Gln	Arg	Asp	Leu
	530					535						540			
Arg	His	Asn	Ile	Ala	Lys	Gln	Leu	Cys	Leu	His	Val	Ser	Lys	Gly	Ala
545					550					555					560
Leu	Gly	Leu	Gly	Ser	Cys	His	Phe	Thr	Gly	Lys	Asn	Ser	Gln	Val	Pro
				565					570					575	
Lys	Asp	Glu	Glu	Trp	Glu	Leu	Ala	Gln	Asp	Gln	Leu	Ile	Arg	Asn	Ser
			580					585					590		
Gly	Ser	Gly	Thr	Cys	Leu	Thr	Ser	Gln	Asp	Lys	Lys	Pro	Ala	Met	Ala
		595					600					605			
Pro	Cys	Asn	Pro	Ser	Asp	Pro	His	Gln	Leu	Trp	Leu	Phe	Val	*	
	610					615					620		622		

<211> 345
 <212> PRT
 <213> Homo sapiens

<400> 1713
 Met Ile Asp Glu Leu Asn Lys Gln Val Ser Glu Leu Ser Gln Leu Tyr
 1 5 10 15
 Lys Glu Ala Gln Ala Glu Leu Glu Asp Tyr Arg Lys Arg Lys Ser Leu
 20 25 30
 Glu Asp Val Thr Ala Glu Tyr Ile His Lys Ala Glu His Glu Lys Leu
 35 40 45
 Met Gln Leu Thr Asn Val Ser Arg Ala Lys Ala Glu Asp Ala Leu Ser
 50 55 60
 Glu Met Lys Ser Gln Tyr Ser Lys Val Leu Asn Glu Leu Thr Gln Leu
 65 70 75 80
 Lys Gln Leu Val Asp Ala Gln Lys Glu Asn Ser Val Ser Ile Thr Glu
 85 90 95
 His Leu Gln Val Ile Thr Thr Leu Arg Thr Ala Ala Lys Glu Met Glu
 100 105 110
 Glu Lys Ile Ser Asn Leu Lys Glu His Leu Ala Ser Lys Glu Val Glu
 115 120 125
 Val Ala Lys Leu Glu Lys Gln Leu Leu Glu Glu Lys Ala Ala Met Thr
 130 135 140
 Asp Ala Met Val Pro Arg Ser Ser Tyr Glu Lys Leu Gln Ser Ser Leu
 145 150 155 160
 Glu Ser Glu Val Ser Val Leu Ala Ser Lys Leu Lys Glu Ser Val Lys
 165 170 175
 Glu Lys Glu Lys Val His Ser Glu Val Val Gln Ile Arg Ser Glu Val
 180 185 190
 Ser Gln Val Lys Arg Glu Lys Glu Asn Ile Gln Thr Leu Leu Lys Ser
 195 200 205
 Lys Glu Gln Glu Val Asn Glu Leu Leu Gln Lys Phe Gln Gln Ala Gln
 210 215 220
 Glu Glu Leu Ala Glu Met Lys Arg Tyr Ser Glu Ser Ser Ser Lys Leu
 225 230 235 240
 Glu Glu Asp Lys Asp Lys Lys Ile Asn Glu Met Ser Lys Glu Val Thr
 245 250 255
 Lys Leu Lys Glu Ala Leu Asn Ser Leu Ser Gln Leu Ser Tyr Ser Thr
 260 265 270
 Ser Ser Ser Lys Arg Gln Ser Gln Gln Leu Glu Ala Leu Gln Gln Gln
 275 280 285
 Val Lys Gln Leu Gln Asn Gln Leu Ala Glu Cys Lys Lys Gln His Gln
 290 295 300
 Glu Val Ile Ser Val Tyr Arg Met His Leu Leu Tyr Ala Val Gln Gly
 305 310 315 320
 Gln Met Asp Glu Asp Val Gln Lys Val Leu Lys Gln Ile Leu Thr Met
 325 330 335
 Cys Lys Asn Gln Ser Gln Lys Lys *
 340 344

<210> 1714
 <211> 305
 <212> PRT
 <213> Homo sapiens

<400> 1714
 Met Ala His Leu Gly Asn Cys Leu Leu Ser Ile Lys Pro Gln Glu Lys
 1 5 10 15
 Ser Glu Gly Leu Gln Leu Asn Phe Gln Gln Asn Val Asp Asp Ala Met
 20 25 30

Thr Val Leu Pro Lys Leu Ala Thr Gly Leu Asp Val Asn Val Arg Phe
 35 40 45
 Thr Gly Val Ser Asp Phe Glu Tyr Thr Pro Glu Cys Ser Val Phe Asp
 50 55 60
 Leu Leu Gly Ile Pro Leu Tyr His Gly Trp Leu Val Asp Pro Gln Gln
 65 70 75 80
 Ser Pro Glu Ala Ala Arg Ala Val Gly Lys Leu Ser Tyr Asn Gln Leu
 85 90 95
 Val Glu Arg Ile Ile Thr Cys Lys His Ser Ser Asp Thr Asn Leu Val
 100 105 110
 Thr Glu Gly Leu Ile Ala Glu Gln Phe Leu Glu Thr Thr Ala Ala His
 115 120 125
 Leu Thr Tyr His Gly Leu Cys Glu Leu Thr Ala Ala Ala Lys Glu Gly
 130 135 140
 Glu Leu Ser Val Phe Phe Arg Asn Asn His Phe Ser Thr Met Thr Lys
 145 150 155 160
 His Lys Ser His Leu Tyr Leu Leu Val Thr Asp Gln Gly Phe Leu Gln
 165 170 175
 Glu Glu Gln Val Val Trp Glu Ser Leu His Asn Val Asp Gly Asp Ser
 180 185 190
 Cys Phe Cys Asp Ser Asp Phe His Leu Ser His Ser Leu Gly Lys Gly
 195 200 205
 Pro Gly Ala Glu Gly Gly Ser Gly Ser Pro Glu Lys Gln Leu Gln Val
 210 215 220
 Asp Gln Asp Tyr Leu Ile Ala Leu Ser Leu Gln Gln Gln Gln Pro Arg
 225 230 235 240
 Gly Pro Leu Gly Leu Thr Asp Leu Glu Leu Ala Gln Gln Leu Gln Gln
 245 250 255
 Glu Glu Tyr Gln Gln Gln Gln Ala Ala Gln Pro Val Arg Met Arg Thr
 260 265 270
 Arg Val Leu Ser Leu Gln Gly Arg Gly Ala Thr Ser Gly Arg Pro Ala
 275 280 285
 Gly Glu Arg Arg Gln Arg Pro Lys His Glu Ser Asp Cys Ile Leu Leu
 290 295 300 304
 *

<210> 1715
 <211> 471
 <212> PRT
 <213> Homo sapiens

<400> 1715
 Met Glu Phe Ala Ala Glu Asn Glu Gly Lys Ser Gly Gly Gly Leu His
 1 5 10 15
 Ser Val Ala Glu Gly Val Arg Leu Ser Pro Glu Pro Gly Arg Glu Gly
 20 25 30
 Val Arg Asp Leu Ala Gly Ala Glu Glu Phe Gly Gly Gly Glu Glu Gly
 35 40 45
 Thr Gly Leu Thr Gly Ile Lys Glu Ile Gly Asp Gly Glu Glu Gly Ser
 50 55 60
 Gly Gln Arg Pro Glu Glu Ile Pro Met Asp Leu Thr Val Val Lys Gln
 65 70 75 80
 Glu Ile Ile Asp Trp Pro Gly Thr Glu Gly Arg Leu Ala Gly Gln Trp
 85 90 95
 Val Glu Gln Glu Val Glu Asp Arg Pro Glu Val Lys Asp Glu Asn Ala
 100 105 110
 Gly Val Leu Glu Val Lys Gln Glu Thr Asp Ser Ser Leu Val Val Lys
 115 120 125
 Glu Ala Lys Val Gly Glu Pro Glu Val Lys Glu Glu Lys Val Lys Glu
 130 135 140

Glu Val Met Asp Trp Ser Glu Val Lys Glu Glu Lys Asp Asn Leu Glu
 145 150 155 160
 Ile Lys Gln Glu Glu Lys Phe Val Gly Gln Cys Ile Lys Glu Glu Leu
 165 170 175
 Met His Gly Glu Cys Val Lys Glu Glu Lys Asp Phe Leu Lys Lys Glu
 180 185 190
 Ile Val Asp Asp Thr Lys Val Lys Glu Glu Pro Pro Ile Asn His Pro
 195 200 205
 Val Gly Cys Lys Arg Lys Leu Ala Met Ser Arg Cys Glu Thr Cys Gly
 210 215 220
 Thr Glu Glu Ala Lys Tyr Arg Cys Pro Arg Cys Met Arg Tyr Ser Cys
 225 230 235 240
 Ser Leu Pro Cys Val Lys Lys His Lys Ala Glu Leu Thr Cys Asn Gly
 245 250 255
 Val Arg Asp Lys Thr Ala Tyr Ile Ser Ile Gln Gln Phe Thr Glu Met
 260 265 270
 Asn Leu Leu Ser Asp Tyr Arg Phe Leu Glu Asp Val Ala Arg Thr Ala
 275 280 285
 Asp His Ile Ser Arg Asp Ala Phe Leu Lys Arg Pro Ile Ser Asn Lys
 290 295 300
 Tyr Met Tyr Phe Met Lys Asn Arg Ala Arg Arg Gln Gly Ile Asn Leu
 305 310 315 320
 Lys Leu Leu Pro Asn Gly Phe Thr Lys Arg Lys Glu Asn Ser Thr Phe
 325 330 335
 Phe Asp Lys Lys Lys Gln Gln Phe Cys Trp His Val Lys Leu Gln Phe
 340 345 350
 Pro Gln Ser Gln Ala Glu Tyr Ile Glu Lys Arg Val Pro Asp Asp Lys
 355 360 365
 Thr Ile Asn Glu Ile Leu Lys Pro Tyr Ile Asp Pro Glu Lys Ser Asp
 370 375 380
 Pro Val Ile Arg Gln Arg Leu Lys Ala Tyr Ile Arg Ser Gln Thr Gly
 385 390 395 400
 Val Gln Ile Leu Met Lys Ile Glu Tyr Met Gln Gln Asn Leu Val Arg
 405 410 415
 Tyr Tyr Glu Leu Asp Pro Tyr Lys Ser Leu Leu Asp Asn Leu Arg Asn
 420 425 430
 Lys Val Ile Ile Glu Tyr Pro Thr Leu His Val Val Leu Lys Gly Ser
 435 440 445
 Asn Asn Asp Met Lys Val Leu His Gln Val Lys Ser Glu Ser Thr Lys
 450 455 460
 Asn Val Gly Asn Glu Asn *
 465 470

<210> 1716

<211> 645

<212> PRT

<213> Homo sapiens

<400> 1716

Met Arg Asp Gly Gly Lys Tyr Ser Leu Glu Gln Arg Gly Val Leu Gln
 1 5 10 15
 Lys Leu Ile His His Arg Lys Glu Thr Leu Ser Arg Arg Gly Pro Ser
 20 25 30
 Ala Ser Ser Val Ala Val Met Thr Ser Ser Thr Ser Asp His His Leu
 35 40 45
 Asp Ala Ala Ala Arg Gln Pro Asn Gly Val Cys Arg Ala Gly Phe
 50 55 60
 Glu Arg Gln His Ser Leu Pro Ser Ser Glu His Leu Gly Ala Asp Gly
 65 70 75 80
 Gly Leu Tyr Gln Ile Pro Leu Pro Ser Ser Gln Ile Pro Pro Gln Pro
 85 90 95

Arg	Arg	Ala	Ala	Pro	Thr	Thr	Pro	Pro	Pro	Pro	Val	Lys	Arg	Arg	Asp
			100					105					110		
Arg	Glu	Ala	Leu	Met	Ala	Ser	Gly	Ser	Gly	Gly	His	Asn	Thr	Met	Pro
		115					120					125			
Ser	Gly	Gly	Asn	Ser	Val	Ser	Ser	Gly	Ser	Ser	Val	Ser	Ser	Thr	Ser
	130					135					140				
Leu	Asp	Thr	Leu	Tyr	Thr	Ser	Ser	Ser	Pro	Ser	Glu	Pro	Gly	Ser	Ser
145					150					155					160
Cys	Ser	Pro	Thr	Pro	Pro	Pro	Val	Pro	Arg	Arg	Gly	Thr	His	Thr	Thr
			165					170					175		
Val	Ser	Gln	Val	Gln	Pro	Pro	Pro	Ser	Lys	Ala	Ser	Ala	Pro	Glu	Pro
			180					185					190		
Pro	Ala	Glu	Glu	Glu	Val	Ala	Thr	Gly	Thr	Thr	Ser	Ala	Ser	Asp	Asp
	195					200					205				
Leu	Glu	Ala	Leu	Gly	Thr	Leu	Ser	Leu	Gly	Thr	Thr	Glu	Glu	Lys	Ala
	210					215					220				
Ala	Ala	Glu	Ala	Ala	Val	Pro	Arg	Thr	Ile	Gly	Ala	Glu	Leu	Met	Glu
225					230					235					240
Leu	Val	Arg	Arg	Asn	Thr	Gly	Leu	Ser	His	Glu	Leu	Cys	Arg	Val	Ala
			245					250					255		
Ile	Gly	Ile	Ile	Val	Gly	His	Ile	Gln	Ala	Ser	Val	Pro	Ala	Ser	Ser
			260					265					270		
Pro	Val	Met	Glu	Gln	Val	Leu	Leu	Ser	Leu	Val	Glu	Gly	Lys	Asp	Leu
	275					280					285				
Ser	Met	Ala	Leu	Pro	Ser	Gly	Gln	Val	Cys	His	Asp	Gln	Gln	Arg	Leu
	290				295						300				
Glu	Val	Ile	Phe	Ala	Asp	Leu	Ala	Arg	Arg	Lys	Asp	Asp	Ala	Gln	Gln
305					310					315					320
Arg	Ser	Trp	Ala	Leu	Tyr	Glu	Asp	Glu	Gly	Val	Ile	Arg	Cys	Tyr	Leu
			325					330					335		
Glu	Glu	Leu	Leu	His	Ile	Leu	Thr	Asp	Ala	Asp	Pro	Glu	Val	Cys	Lys
			340					345					350		
Lys	Met	Cys	Lys	Arg	Asn	Glu	Phe	Glu	Ser	Val	Leu	Ala	Leu	Val	Ala
	355					360					365				
Tyr	Tyr	Gln	Met	Glu	His	Arg	Ala	Ser	Leu	Arg	Leu	Leu	Leu	Leu	Lys
	370				375						380				
Cys	Phe	Gly	Ala	Met	Cys	Ser	Leu	Asp	Ala	Ala	Ile	Ile	Ser	Thr	Leu
385					390					395					400
Val	Ser	Ser	Val	Leu	Pro	Val	Glu	Leu	Ala	Arg	Asp	Met	Gln	Thr	Asp
			405					410					415		
Thr	Gln	Asp	His	Gln	Lys	Leu	Cys	Tyr	Ser	Ala	Leu	Ile	Leu	Ala	Met
			420					425					430		
Val	Phe	Ser	Met	Gly	Glu	Ala	Val	Pro	Tyr	Ala	His	Tyr	Glu	His	Leu
	435					440						445			
Gly	Thr	Pro	Phe	Ala	Gln	Phe	Leu	Leu	Asn	Ile	Val	Glu	Asp	Gly	Leu
	450				455						460				
Pro	Leu	Asp	Thr	Thr	Glu	Gln	Leu	Pro	Asp	Leu	Cys	Val	Asn	Leu	Leu
465					470					475					480
Leu	Ala	Leu	Asn	Leu	His	Leu	Pro	Ala	Ala	Asp	Gln	Asn	Val	Ile	Met
			485					490						495	
Ala	Ala	Leu	Ser	Lys	His	Ala	Asn	Val	Lys	Ile	Phe	Ser	Glu	Lys	Leu
			500					505					510		
Leu	Leu	Leu	Leu	Asn	Arg	Gly	Asp	Asp	Pro	Val	Arg	Ile	Phe	Lys	His
	515					520					525				
Glu	Pro	Gln	Pro	Pro	His	Ser	Val	Leu	Lys	Phe	Leu	Gln	Asp	Val	Phe
	530				535						540				
Gly	Ser	Pro	Ala	Thr	Ala	Ala	Ile	Phe	Tyr	His	Thr	Asp	Met	Met	Ala
545					550					555					560
Leu	Ile	Asp	Ile	Thr	Val	Arg	His	Ile	Ala	Asp	Leu	Ser	Pro	Gly	Asp
			565					570					575		
Lys	Leu	Arg	Met	Glu	Tyr	Leu	Ser	Leu	Met	His	Ala	Ile	Val	Arg	Thr
			580					585					590		
Thr	Pro	Tyr	Leu	Gln	His	Arg	His	Arg	Leu	Pro	Asp	Leu	Gln	Ala	Ile
		595					600						605		

Leu	Arg	Arg	Ile	Leu	Asn	Glu	Glu	Glu	Thr	Ser	Pro	Gln	Cys	Gln	Met
610						615					620				
Asp	Arg	Met	Ile	Val	Arg	Glu	Met	Cys	Lys	Glu	Phe	Leu	Val	Leu	Gly
625					630					635					640
Glu	Ala	Pro	Ser	*											
			644												

<210> 1717
 <211> 186
 <212> PRT
 <213> Homo sapiens

<400> 1717

Met	Leu	Lys	Ser	Met	Val	Leu	Trp	Leu	Gly	Glu	Gln	Val	Gln	Ser	Leu
1				5					10					15	
Gln	Leu	Gln	Gln	Gln	Leu	Arg	His	His	Phe	Asn	His	Ile	His	Ile	Cys
		20					25						30		
Val	Thr	Asn	Ser	Glu	Tyr	Asn	Gln	Ser	Glu	Tyr	Pro	Trp	Asp	Leu	Val
		35					40					45			
Lys	Ala	His	Leu	Gln	Gly	Ala	Phe	Thr	Ser	Asn	Ile	Thr	Phe	Asp	Ile
	50					55					60				
Ser	Glu	Leu	Gln	Asn	Lys	Ile	Leu	Asp	Leu	Asn	Arg	His	Thr	Gln	Glu
65				70						75					80
Phe	Gln	Pro	Ser	Leu	Glu	Asp	Trp	Thr	Glu	Phe	Gln	Glu	Gly	Leu	Glu
				85					90					95	
Ser	Leu	Asn	Pro	Trp	Thr	Tyr	Leu	Lys	Tyr	His	Ser	Asn	Ile	Leu	Tyr
			100					105					110		
Val	Val	Leu	Gly	Val	Met	Leu	Phe	Cys	Leu	Cys	Leu	Leu	Phe	Ile	Val
		115					120					125			
Cys	Lys	Ile	Gly	Trp	Thr	Ala	Asn	Arg	Arg	Met	Arg	Ala	Ala	Gln	Pro
	130					135				140					
Gly	Leu	Thr	Phe	Phe	Gln	Leu	Ile	His	Lys	Gln	Gly	Asp	Met	Gln	Gly
145					150					155					160
Ala	Glu	Gly	Pro	Trp	Asp	Val	Thr	Asn	Ser	Ala	Phe	His	Trp	Arg	Leu
				165					170					175	
Tyr	Asp	Gln	Thr	Ala	Asn	Cys	Leu	Ser	*						
			180					185							

<210> 1718
 <211> 440
 <212> PRT
 <213> Homo sapiens

<400> 1718

Met	Phe	Met	Phe	Asn	Trp	Phe	Thr	Asp	Cys	Leu	Trp	Thr	Leu	Phe	Leu
1				5					10					15	
Ser	Asn	Tyr	Gln	Pro	Ser	Val	Glu	Ser	Ser	Ser	Pro	Gly	Gly	Ser	Ala
			20					25					30		
Thr	Ser	Asp	Asp	His	Glu	Phe	Asp	Pro	Ser	Ala	Asp	Met	Leu	Val	His
		35					40					45			
Asp	Phe	Asp	Asp	Glu	Arg	Thr	Leu	Glu	Glu	Glu	Glu	Met	Met	Glu	Gly
	50					55					60				
Glu	Thr	Asn	Phe	Ser	Ser	Glu	Ile	Glu	Asp	Leu	Ala	Arg	Glu	Gly	Asp
65				70						75					80
Met	Pro	Ile	His	Glu	Leu	Leu	Ser	Leu	Tyr	Gly	Tyr	Gly	Ser	Thr	Val
				85					90					95	
Arg	Leu	Pro	Glu	Glu	Asp	Glu	Glu	Glu	Glu	Glu	Glu	Glu	Glu	Glu	Gly
			100					105					110		

Glu Asp Asp Glu Asp Ala Asp Asn Asp Asp Asn Ser Gly Cys Ser Gly
 115 120 125
 Glu Asn Lys Glu Glu Asn Ile Lys Asp Ser Ser Gly Gln Glu Asp Glu
 130 135 140
 Thr Gln Ser Ser Asn Asp Asp Pro Ser Gln Ser Val Ala Ser Gln Asp
 145 150 155 160
 Ala Gln Glu Ile Ile Arg Pro Arg Arg Cys Lys Tyr Phe Asp Thr Asn
 165 170 175
 Ser Glu Val Glu Glu Glu Ser Glu Glu Asp Glu Asp Tyr Ile Pro Ser
 180 185 190
 Glu Asp Trp Lys Lys Glu Ile Met Val Gly Ser Met Phe Gln Ala Glu
 195 200 205
 Ile Pro Val Gly Ile Cys Arg Tyr Lys Glu Asn Glu Lys Val Tyr Glu
 210 215 220
 Asn Asp Asp Gln Leu Leu Trp Asp Pro Glu Tyr Leu Pro Glu Asp Lys
 225 230 235 240
 Val Ile Ile Phe Leu Lys Asp Ala Ser Arg Arg Thr Gly Asp Glu Lys
 245 250 255
 Gly Val Glu Ala Ile Pro Glu Gly Ser His Ile Lys Asp Asn Glu Gln
 260 265 270
 Ala Leu Tyr Glu Leu Val Lys Cys Asn Phe Asp Thr Glu Glu Ala Leu
 275 280 285
 Arg Arg Leu Arg Phe Asn Val Lys Ala Ala Arg Glu Glu Leu Ser Val
 290 295 300
 Trp Thr Glu Glu Glu Cys Arg Asn Phe Glu Gln Gly Leu Lys Ala Tyr
 305 310 315 320
 Gly Lys Asp Phe His Leu Ile Gln Ala Asn Lys Val Arg Thr Arg Ser
 325 330 335
 Val Gly Glu Cys Val Ala Phe Tyr Tyr Met Trp Lys Lys Ser Glu Arg
 340 345 350
 Tyr Asp Phe Phe Ala Gln Gln Thr Arg Phe Gly Lys Lys Lys Tyr Asn
 355 360 365
 Leu His Pro Gly Val Thr Asp Tyr Met Asp Arg Leu Leu Asp Glu Ser
 370 375 380
 Glu Ser Ala Ala Ser Ser Arg Ala Gln Ser Pro Pro Pro Thr Ala Ser
 385 390 395 400
 Asn Ser Ser Asn Ser Gln Ser Glu Lys Glu Asp Gly Thr Val Ser Thr
 405 410 415
 Ala Asn Gln Asn Gly Lys Gln Pro Glu Lys His Phe Ser Phe Phe Ile
 420 425 430
 Ile Arg Asp Thr Phe Leu Gln *
 435 439

<210> 1719

<211> 448

<212> PRT

<213> Homo sapiens

<400> 1719

Met Gly Glu Asp Thr Asp Thr Arg Lys Ile Asn His Ser Phe Leu Arg
 1 5 10 15
 Asp His Ser Tyr Val Thr Glu Ala Asp Ile Ile Ser Thr Val Glu Phe
 20 25 30
 Asn His Thr Gly Glu Leu Leu Ala Thr Gly Asp Lys Gly Gly Arg Val
 35 40 45
 Val Ile Phe Gln Arg Glu Pro Glu Ser Lys Asn Ala Pro His Ser Gln
 50 55 60
 Gly Glu Tyr Asp Val Tyr Ser Thr Phe Gln Ser His Glu Pro Glu Phe
 65 70 75 80
 Asp Tyr Leu Lys Ser Leu Glu Ile Glu Glu Lys Ile Asn Lys Ile Lys
 85 90 95

Trp	Leu	Pro	Gln	Gln	Asn	Ala	Ala	His	Ser	Leu	Leu	Ser	Thr	Asn	Asp
			100					105					110		
Lys	Thr	Ile	Lys	Leu	Trp	Lys	Ile	Thr	Glu	Arg	Asp	Lys	Arg	Pro	Glu
		115					120					125			
Gly	Tyr	Asn	Leu	Lys	Asp	Glu	Glu	Gly	Lys	Leu	Lys	Asp	Leu	Ser	Thr
	130					135					140				
Val	Thr	Ser	Leu	Gln	Val	Pro	Val	Leu	Lys	Pro	Met	Asp	Leu	Met	Val
145					150					155					160
Glu	Val	Ser	Pro	Arg	Arg	Ile	Phe	Ala	Asn	Gly	His	Thr	Tyr	His	Ile
				165					170					175	
Asn	Ser	Ile	Ser	Val	Asn	Ser	Asp	Cys	Glu	Thr	Tyr	Met	Ser	Ala	Asp
		180						185					190		
Asp	Leu	Arg	Ile	Asn	Leu	Trp	His	Leu	Ala	Ile	Thr	Asp	Arg	Ser	Phe
	195					200						205			
Asn	Ile	Val	Asp	Ile	Lys	Pro	Ala	Asn	Met	Glu	Asp	Leu	Thr	Glu	Val
	210					215					220				
Ile	Thr	Ala	Ser	Glu	Phe	His	Pro	His	His	Cys	Asn	Leu	Phe	Val	Tyr
225					230					235					240
Ser	Ser	Ser	Lys	Gly	Ser	Leu	Arg	Leu	Cys	Asp	Met	Arg	Ala	Ala	Ala
			245						250				255		
Leu	Cys	Asp	Lys	His	Ser	Lys	Leu	Phe	Glu	Glu	Pro	Glu	Asp	Pro	Ser
		260						265					270		
Asn	Arg	Ser	Phe	Phe	Ser	Glu	Ile	Ile	Ser	Ser	Val	Ser	Asp	Val	Lys
	275						280					285			
Phe	Ser	His	Ser	Gly	Arg	Tyr	Met	Leu	Thr	Arg	Asp	Tyr	Leu	Thr	Val
	290					295					300				
Lys	Val	Trp	Asp	Leu	Asn	Met	Glu	Ala	Arg	Pro	Ile	Glu	Thr	Tyr	Gln
305					310					315					320
Val	His	Asp	Tyr	Leu	Arg	Ser	Lys	Leu	Cys	Ser	Leu	Tyr	Glu	Asn	Asp
				325					330					335	
Cys	Ile	Phe	Asp	Lys	Phe	Glu	Cys	Ala	Trp	Asn	Gly	Ser	Asp	Ser	Val
	340							345					350		
Ile	Met	Thr	Gly	Thr	Tyr	Asn	Asn	Phe	Phe	Arg	Met	Phe	Asp	Arg	Asn
	355						360					365			
Thr	Lys	Arg	Asp	Val	Thr	Leu	Glu	Ala	Ser	Arg	Glu	Ser	Ser	Lys	Pro
	370					375					380				
Arg	Ala	Val	Leu	Lys	Pro	Arg	Arg	Val	Cys	Val	Gly	Gly	Lys	Arg	Arg
385					390					395					400
Arg	Asp	Asp	Ile	Ser	Val	Asp	Ser	Leu	Asp	Phe	Thr	Lys	Lys	Ile	Leu
			405						410					415	
His	Thr	Ala	Trp	His	Pro	Ala	Glu	Asn	Ile	Ile	Ala	Ile	Ala	Ala	Thr
		420						425					430		
Asn	Asn	Leu	Tyr	Ile	Phe	Gln	Asp	Lys	Val	Asn	Ser	Asp	Met	His	*
	435						440					445		447	

<210> 1720

<211> 141

<212> PRT

<213> Homo sapiens

<400> 1720

Met	Ser	Phe	Ser	Leu	Asn	Phe	Thr	Leu	Pro	Ala	Asn	Thr	Thr	Ser	Ser
1				5					10					15	
Pro	Val	Thr	Gly	Gly	Lys	Glu	Thr	Asp	Cys	Gly	Pro	Ser	Leu	Gly	Leu
			20					25					30		
Ala	Ala	Gly	Ile	Pro	Leu	Leu	Val	Ala	Thr	Ala	Leu	Leu	Val	Ala	Leu
		35					40					45			
Leu	Phe	Thr	Leu	Ile	His	Arg	Arg	Arg	Ser	Ser	Ile	Glu	Ala	Met	Glu
	50					55					60				
Glu	Ser	Asp	Arg	Pro	Cys	Glu	Ile	Ser	Glu	Ile	Asp	Asp	Asn	Pro	Lys
65					70					75					80

Ile	Ser	Glu	Asn	Pro	Arg	Arg	Ser	Pro	Thr	His	Glu	Lys	Asn	Thr	Met
				85					90					95	
Gly	Ala	Gln	Glu	Ala	His	Ile	Tyr	Val	Lys	Thr	Val	Ala	Gly	Ser	Glu
			100					105					110		
Glu	Pro	Val	His	Asp	Arg	Tyr	Arg	Pro	Thr	Ile	Glu	Met	Glu	Arg	Arg
			115				120					125			
Arg	Gly	Leu	Trp	Trp	Leu	Val	Pro	Arg	Leu	Ser	Leu	Glu			
	130					135					140	141			

<210> 1721
 <211> 148
 <212> PRT
 <213> Homo sapiens

<400> 1721

Met	Asp	Ser	Leu	Gln	Lys	Gln	Asp	Leu	Arg	Arg	Pro	Lys	Ile	His	Gly
1				5					10					15	
Ala	Val	Gln	Ala	Ser	Pro	Tyr	Gln	Pro	Pro	Thr	Leu	Ala	Ser	Leu	Gln
			20					25					30		
Arg	Leu	Leu	Trp	Val	Arg	Gln	Ala	Ala	Thr	Leu	Asn	His	Ile	Asp	Glu
		35				40						45			
Val	Trp	Pro	Ser	Leu	Phe	Leu	Gly	Asp	Ala	Tyr	Ala	Ala	Arg	Asp	Lys
	50					55					60				
Ser	Lys	Leu	Ile	Gln	Leu	Gly	Ile	Thr	His	Val	Val	Asn	Ala	Ala	Ala
65				70					75					80	
Gly	Arg	Val	Leu	Val	His	Cys	Ala	Met	Gly	Val	Ser	Arg	Ser	Ala	Thr
				85					90					95	
Leu	Val	Leu	Ala	Phe	Leu	Met	Ile	Tyr	Glu	Asn	Met	Thr	Leu	Val	Glu
			100					105					110		
Ala	Ile	Gln	Thr	Val	Gln	Ala	His	Arg	Asn	Ile	Cys	Pro	Asn	Ser	Gly
		115					120					125			
Phe	Leu	Arg	Gln	Leu	Gln	Val	Leu	Asp	Asn	Arg	Leu	Gly	Arg	Glu	Thr
	130					135					140				
Gly	Arg	Phe	*												
145		147													

<210> 1722
 <211> 138
 <212> PRT
 <213> Homo sapiens

<400> 1722

Met	Gly	Ala	His	Leu	Val	Arg	Arg	Tyr	Leu	Gly	Asp	Ala	Ser	Val	Glu
1				5					10					15	
Pro	Asp	Pro	Leu	Gln	Met	Pro	Thr	Phe	Pro	Pro	Asp	Tyr	Gly	Phe	Pro
			20					25					30		
Glu	Arg	Lys	Glu	Arg	Glu	Met	Val	Ala	Thr	Gln	Gln	Glu	Met	Met	Asp
		35				40						45			
Ala	Gln	Leu	Arg	Leu	Gln	Leu	Arg	Asp	Tyr	Cys	Ala	His	His	Leu	Ile
	50					55					60				
Arg	Leu	Leu	Lys	Cys	Lys	Arg	Asp	Ser	Phe	Pro	Asn	Phe	Leu	Ala	Cys
65				70					75					80	
Lys	Gln	Glu	Arg	His	Asp	Trp	Asp	Tyr	Cys	Glu	His	Arg	Asp	Tyr	Val
				85				90						95	
Met	Arg	Met	Lys	Glu	Phe	Glu	Arg	Glu	Arg	Arg	Leu	Leu	Gln	Arg	Lys
			100					105					110		
Lys	Arg	Arg	Glu	Lys	Lys	Ala	Ala	Glu	Leu	Ala	Lys	Gly	Gln	Gly	Pro
		115				120						125			

Gly Glu Val Asp Pro Lys Val Ala Leu *
 130 135 137

<210> 1723
 <211> 122
 <212> PRT
 <213> Homo sapiens

<400> 1723
 Met Gly Ala His Leu Val Arg Arg Tyr Leu Gly Asp Ala Ser Val Glu
 1 5 10 15
 Pro Asp Pro Leu Gln Met Pro Thr Phe Pro Pro Asp Tyr Gly Phe Pro
 20 25 30
 Glu Arg Lys Glu Arg Glu Met Val Ala Thr Gln Gln Glu Met Met Asp
 35 40 45
 Ala Leu Leu Lys Cys Lys Arg Asp Ser Phe Pro Asn Phe Leu Ala Cys
 50 55 60
 Lys Gln Glu Arg His Asp Trp Asp Tyr Cys Glu His Arg Asp Tyr Val
 65 70 75 80
 Met Arg Met Lys Glu Phe Glu Arg Glu Arg Arg Leu Leu Gln Arg Lys
 85 90 95
 Lys Arg Arg Glu Lys Lys Ala Ala Glu Leu Ala Lys Gly Gln Gly Pro
 100 105 110
 Gly Glu Val Asp Pro Lys Val Ala Leu *
 115 120 121

<210> 1724
 <211> 1242
 <212> PRT
 <213> Homo sapiens

<400> 1724
 Met Arg Ala Val Leu Thr Trp Arg Asp Lys Ala Glu His Cys Ile Asn
 1 5 10 15
 Asp Ile Ala Phe Lys Pro Asp Gly Thr Gln Leu Ile Leu Ala Ala Gly
 20 25 30
 Ser Arg Leu Leu Val Tyr Asp Thr Ser Asp Gly Thr Leu Leu Gln Pro
 35 40 45
 Leu Lys Gly His Lys Asp Thr Val Tyr Cys Val Ala Tyr Ala Lys Asp
 50 55 60
 Gly Lys Arg Phe Ala Ser Gly Ser Ala Asp Lys Ser Val Ile Ile Trp
 65 70 75 80
 Thr Ser Lys Leu Glu Gly Ile Leu Lys Tyr Thr His Asn Asp Ala Ile
 85 90 95
 Gln Cys Val Ser Tyr Asn Pro Ile Thr His Gln Leu Ala Ser Cys Ser
 100 105 110
 Ser Ser Asp Phe Gly Leu Trp Ser Pro Glu Gln Lys Ser Val Ser Lys
 115 120 125
 His Lys Ser Ser Ser Lys Ile Ile Cys Cys Ser Trp Thr Asn Asp Gly
 130 135 140
 Gln Tyr Leu Ala Leu Gly Met Phe Asn Gly Ile Ile Ser Ile Arg Asn
 145 150 155 160
 Lys Asn Gly Glu Glu Lys Val Lys Ile Glu Arg Pro Gly Gly Ser Leu
 165 170 175
 Ser Pro Ile Trp Ser Ile Cys Trp Asn Pro Ser Ser Arg Trp Glu Ser
 180 185 190
 Phe Trp Met Asn Arg Glu Asn Glu Asp Ala Glu Asp Val Ile Val Asn
 195 200 205

Arg	Tyr	Ile	Gln	Glu	Ile	Pro	Ser	Thr	Leu	Lys	Ser	Ala	Val	Tyr	Ser
210						215					220				
Ser	Gln	Gly	Ser	Glu	Ala	Glu	Glu	Glu	Glu	Pro	Glu	Glu	Glu	Asp	Asp
225					230					235					240
Ser	Pro	Arg	Asp	Asp	Asn	Leu	Glu	Glu	Arg	Asn	Asp	Ile	Leu	Ala	Val
			245						250					255	
Ala	Asp	Trp	Gly	Gln	Lys	Val	Ser	Phe	Tyr	Gln	Leu	Ser	Gly	Lys	Gln
		260						265					270		
Ile	Gly	Lys	Asp	Arg	Ala	Leu	Asn	Phe	Asp	Pro	Cys	Cys	Ile	Ser	Tyr
	275						280					285			
Phe	Thr	Lys	Gly	Glu	Tyr	Ile	Leu	Leu	Gly	Gly	Ser	Asp	Lys	Gln	Val
	290					295					300				
Ser	Leu	Phe	Thr	Lys	Asp	Gly	Val	Arg	Leu	Gly	Thr	Val	Gly	Glu	Gln
305					310					315					320
Asn	Ser	Trp	Val	Trp	Thr	Cys	Gln	Ala	Lys	Pro	Asp	Ser	Asn	Tyr	Val
			325						330					335	
Val	Val	Gly	Cys	Gln	Asp	Gly	Thr	Ile	Ser	Phe	Tyr	Gln	Leu	Ile	Phe
		340						345					350		
Ser	Thr	Val	His	Gly	Leu	Tyr	Lys	Asp	Arg	Tyr	Ala	Tyr	Arg	Asp	Ser
	355						360					365			
Met	Thr	Asp	Val	Ile	Val	Gln	His	Leu	Ile	Thr	Glu	Gln	Lys	Val	Arg
	370					375					380				
Ile	Lys	Cys	Lys	Glu	Leu	Val	Lys	Lys	Ile	Ala	Ile	Tyr	Arg	Asn	Arg
385					390					395					400
Leu	Ala	Ile	Gln	Leu	Pro	Glu	Lys	Ile	Leu	Ile	Tyr	Glu	Leu	Tyr	Ser
			405						410					415	
Glu	Asp	Leu	Ser	Asp	Met	His	Tyr	Arg	Val	Lys	Glu	Lys	Ile	Ile	Lys
		420						425					430		
Lys	Phe	Glu	Cys	Asn	Leu	Leu	Val	Val	Cys	Ala	Asn	His	Ile	Ile	Leu
	435						440					445			
Cys	Gln	Glu	Lys	Arg	Leu	Gln	Cys	Leu	Ser	Phe	Ser	Gly	Val	Lys	Glu
	450					455					460				
Arg	Glu	Trp	Gln	Met	Glu	Ser	Leu	Ile	Arg	Tyr	Ile	Lys	Val	Ile	Gly
465					470					475					480
Gly	Pro	Pro	Gly	Arg	Glu	Gly	Leu	Leu	Val	Gly	Leu	Lys	Asn	Gly	Gln
			485						490					495	
Ile	Leu	Lys	Ile	Phe	Val	Asp	Asn	Leu	Phe	Ala	Ile	Val	Leu	Leu	Lys
		500						505					510		
Gln	Ala	Thr	Ala	Val	Arg	Cys	Leu	Asp	Met	Ser	Ala	Ser	Arg	Lys	Lys
	515						520					525			
Leu	Ala	Val	Val	Asp	Glu	Asn	Asp	Thr	Cys	Leu	Val	Tyr	Asp	Ile	Asp
	530					535					540				
Thr	Lys	Glu	Leu	Leu	Phe	Gln	Glu	Pro	Asn	Ala	Asn	Ser	Val	Ala	Trp
545					550					555					560
Asn	Thr	Gln	Cys	Glu	Asp	Met	Leu	Cys	Phe	Ser	Gly	Gly	Gly	Tyr	Leu
			565						570					575	
Asn	Ile	Lys	Ala	Ser	Thr	Phe	Pro	Val	His	Arg	Gln	Lys	Leu	Gln	Gly
		580						585					590		
Phe	Val	Val	Gly	Tyr	Asn	Gly	Ser	Lys	Ile	Phe	Cys	Leu	His	Val	Phe
	595						600					605			
Ser	Ile	Ser	Ala	Val	Glu	Val	Pro	Gln	Ser	Ala	Pro	Met	Tyr	Gln	Tyr
	610					615					620				
Leu	Asp	Arg	Lys	Leu	Phe	Lys	Glu	Ala	Tyr	Gln	Ile	Ala	Cys	Leu	Gly
625					630					635					640
Val	Thr	Asp	Thr	Asp	Trp	Arg	Glu	Leu	Ala	Met	Glu	Ala	Leu	Glu	Gly
			645						650					655	
Leu	Asp	Phe	Glu	Thr	Ala	Lys	Lys	Ala	Phe	Ile	Arg	Val	Gln	Asp	Leu
		660						665					670		
Arg	Tyr	Leu	Glu	Leu	Ile	Ser	Ser	Ile	Glu	Glu	Arg	Lys	Lys	Arg	Gly
	675						680					685			
Glu	Thr	Asn	Asn	Asp	Leu	Phe	Leu	Ala	Asp	Val	Phe	Ser	Tyr	Gln	Gly
	690					695					700				
Lys	Phe	His	Glu	Ala	Ala	Lys	Leu	Tyr	Lys	Arg	Ser	Gly	His	Glu	Asn
705					710					715					720

Leu	Ala	Leu	Glu	Met	Tyr	Thr	Asp	Leu	Cys	Met	Phe	Glu	Tyr	Ala	Lys
				725					730					735	
Asp	Phe	Leu	Gly	Ser	Gly	Asp	Pro	Lys	Glu	Thr	Lys	Met	Leu	Ile	Thr
			740					745					750		
Lys	Gln	Ala	Asp	Trp	Ala	Arg	Asn	Ile	Lys	Glu	Pro	Lys	Ala	Ala	Val
		755					760					765			
Glu	Met	Tyr	Ile	Ser	Ala	Gly	Glu	His	Val	Lys	Ala	Ile	Glu	Ile	Cys
	770					775				780					
Gly	Asp	His	Gly	Trp	Val	Asp	Met	Leu	Ile	Asp	Ile	Ala	Arg	Lys	Leu
785					790					795					800
Asp	Lys	Ala	Glu	Arg	Glu	Pro	Leu	Leu	Leu	Cys	Ala	Thr	Tyr	Leu	Lys
				805					810					815	
Lys	Leu	Asp	Ser	Pro	Gly	Tyr	Ala	Ala	Glu	Thr	Tyr	Leu	Lys	Met	Gly
			820					825					830		
Asp	Leu	Lys	Ser	Leu	Val	Gln	Leu	His	Val	Glu	Thr	Gln	Arg	Trp	Asp
		835					840					845			
Glu	Ala	Phe	Ala	Leu	Gly	Glu	Lys	His	Pro	Glu	Phe	Lys	Asp	Asp	Ile
	850					855					860				
Tyr	Met	Pro	Tyr	Ala	Gln	Trp	Leu	Ala	Glu	Asn	Asp	Arg	Phe	Glu	Glu
865					870					875					880
Ala	Gln	Lys	Ala	Phe	His	Lys	Ala	Gly	Arg	Gln	Arg	Glu	Ala	Val	Gln
				885					890					895	
Val	Leu	Glu	Gln	Leu	Thr	Asn	Asn	Ala	Val	Ala	Glu	Ser	Arg	Phe	Asn
			900					905						910	
Asp	Ala	Ala	Tyr	Tyr	Tyr	Trp	Met	Leu	Ser	Met	Gln	Cys	Leu	Asp	Ile
		915					920					925			
Ala	Gln	Asp	Pro	Ala	Gln	Lys	Asp	Thr	Met	Leu	Gly	Lys	Phe	Tyr	His
	930					935					940				
Phe	Gln	Arg	Leu	Ala	Glu	Leu	Tyr	His	Gly	Tyr	His	Ala	Ile	His	Arg
945					950					955					960
His	Thr	Glu	Asp	Pro	Phe	Ser	Val	His	Arg	Pro	Glu	Thr	Leu	Phe	Asn
			965						970					975	
Ile	Ser	Arg	Phe	Leu	Leu	His	Ser	Leu	Pro	Lys	Asp	Thr	Pro	Ser	Gly
			980					985					990		
Ile	Ser	Lys	Val	Lys	Ile	Leu	Phe	Thr	Leu	Ala	Lys	Gln	Ser	Lys	Ala
	995					1000						1005			
Leu	Gly	Ala	Tyr	Arg	Leu	Ala	Arg	His	Ala	Tyr	Asp	Lys	Leu	Arg	Gly
1010					1015						1020				
Leu	Tyr	Ile	Pro	Ala	Arg	Phe	Gln	Lys	Ser	Ile	Glu	Leu	Gly	Thr	Leu
1025					1030					1035					1040
Thr	Ile	Arg	Ala	Lys	Pro	Phe	His	Asp	Ser	Glu	Glu	Leu	Val	Pro	Leu
			1045						1050					1055	
Cys	Tyr	Arg	Cys	Ser	Thr	Asn	Asn	Pro	Leu	Leu	Asn	Asn	Leu	Gly	Asn
			1060					1065					1070		
Val	Cys	Ile	Asn	Cys	Arg	Gln	Pro	Phe	Ile	Phe	Ser	Ala	Ser	Ser	Tyr
	1075					1080					1085				
Asp	Val	Leu	His	Leu	Val	Glu	Phe	Tyr	Leu	Glu	Glu	Gly	Ile	Thr	Asp
	1090					1095					1100				
Glu	Glu	Ala	Ile	Ser	Leu	Ile	Asp	Leu	Glu	Val	Leu	Arg	Pro	Lys	Arg
1105					1110					1115					1120
Asp	Asp	Arg	Gln	Leu	Glu	Ile	Ala	Asn	Asn	Ser	Ser	Gln	Ile	Leu	Arg
			1125						1130					1135	
Leu	Val	Glu	Thr	Lys	Asp	Ser	Ile	Gly	Asp	Glu	Asp	Pro	Phe	Thr	Ala
		1140						1145					1150		
Lys	Leu	Ser	Phe	Glu	Gln	Gly	Gly	Ser	Glu	Phe	Val	Pro	Val	Val	Val
	1155					1160					1165				
Ser	Arg	Leu	Val	Leu	Arg	Ser	Met	Ser	Arg	Arg	Asp	Val	Leu	Ile	Lys
	1170					1175					1180				
Arg	Trp	Pro	Pro	Pro	Leu	Arg	Trp	Gln	Tyr	Phe	Arg	Ser	Leu	Leu	Pro
1185					1190					1195					1200
Asp	Ala	Ser	Ile	Thr	Met	Cys	Pro	Ser	Cys	Phe	Gln	Met	Phe	His	Ser
			1205						1210					1215	
Glu	Asp	Tyr	Glu	Leu	Leu	Val	Leu	Gln	His	Gly	Cys	Cys	Pro	Tyr	Cys
			1220					1225						1230	

Arg Arg Cys Lys Asp Asp Pro Gly Pro *
 1235 12401241

<210> 1725

<211> 351

<212> PRT

<213> Homo sapiens

<400> 1725

Met Asn Pro Arg Gly Leu Phe Gln Asp Phe Asn Pro Ser Lys Val Leu
 1 5 10 15
 Ile Tyr Thr Cys Leu Leu Leu Phe Ser Gly Leu Leu Pro Leu Arg Leu
 20 25 30
 Asp Gly Ile Ile Gln Trp Ser Tyr Trp Ala Val Phe Ala Pro Ile Trp
 35 40 45
 Leu Arg Lys Leu Leu Val Val Ala Gly Ala Ser Val Gly Ala Gly Val
 50 55 60
 Trp Ala Arg Asn Pro Arg Tyr Arg Thr Glu Gly Glu Ala Cys Val Glu
 65 70 75 80
 Ile Lys Ala Met Leu Ile Ala Val Gly Ile His Leu Leu Leu Leu Met
 85 90 95
 Phe Glu Val Leu Val Cys Asp Arg Val Glu Arg Gly Thr His Phe Trp
 100 105 110
 Leu Leu Val Phe Met Pro Leu Phe Phe Val Ser Pro Val Ser Val Ala
 115 120 125
 Ala Cys Val Trp Gly Phe Arg His Asp Arg Ser Leu Glu Leu Glu Ile
 130 135 140
 Leu Cys Ser Val Asn Ile Leu Gln Phe Ile Phe Ile Ala Leu Lys Leu
 145 150 155 160
 Asp Arg Ile Ile His Trp Pro Trp Leu Val Phe Val Pro Leu Trp
 165 170 175
 Ile Leu Met Ser Phe Leu Cys Leu Val Val Leu Tyr Tyr Ile Val Trp
 180 185 190
 Ser Leu Leu Phe Leu Arg Ser Leu Asp Val Val Ala Glu Gln Arg Arg
 195 200 205
 Thr His Val Thr Met Ala Ile Ser Trp Ile Thr Ile Val Val Pro Leu
 210 215 220
 Leu Thr Phe Glu Val Leu Leu Val His Arg Leu Asp Gly His Asn Thr
 225 230 235 240
 Phe Ser Tyr Val Ser Ile Phe Val Pro Leu Trp Leu Ser Leu Leu Thr
 245 250 255
 Leu Met Ala Thr Thr Phe Arg Arg Lys Gly Gly Asn His Trp Trp Phe
 260 265 270
 Gly Ile Arg Arg Asp Phe Cys Gln Phe Leu Leu Glu Ile Phe Pro Phe
 275 280 285
 Leu Arg Glu Tyr Gly Asn Ile Ser Tyr Asp Leu His His Glu Asp Ser
 290 295 300
 Glu Asp Ala Glu Glu Thr Ser Val Pro Glu Ala Pro Lys Ile Ala Pro
 305 310 315 320
 Ile Phe Gly Lys Lys Ala Arg Val Val Ile Thr Gln Ser Pro Gly Lys
 325 330 335
 Tyr Val Pro Pro Pro Pro Lys Leu Asn Ile Asp Met Pro Asp *
 340 345 350

<210> 1726

<211> 240

<212> PRT

<213> Homo sapiens

<400> 1726

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Met Thr Cys Phe Gly Pro Tyr Pro Ile Gly Thr Gly Leu Gln Gly Ile
 1          5          10          15
Thr Leu Cys Tyr Ser Cys Phe Pro Ser Phe Cys Lys Met Lys Ser Arg
          20          25          30
Met Cys Met Ala Ile Ser Ile Cys Gln Thr Leu Ser Met Leu Ser Phe
          35          40          45
Val Val Cys Ala Phe Arg Tyr Arg His Met Phe Lys Arg Gly Trp Pro
          50          55          60
Met Gly Thr Cys Cys Leu Phe Leu Pro Thr Ala Ala Pro Val Leu Ser
 65          70          75          80
Cys Glu Ala Ala Thr Gln Thr Glu Arg Arg Leu Asp Leu Ala Ala Val
          85          90          95
Thr Leu Arg Arg Gly Leu Arg Ser Arg Ala Ser Arg Cys Arg Pro Arg
          100          105          110
Ser Leu Ile Asp Tyr Lys Ser Tyr Met Asp Thr Lys Leu Leu Val Ala
          115          120          125
Arg Phe Leu Glu Gln Ser Ser Cys Thr Met Thr Pro Asp Ile His Glu
          130          135          140
Leu Val Glu Asn Ile Lys Ser Val Leu Lys Ser Asp Glu Glu His Met
145          150          155          160
Glu Glu Ala Ile Thr Ser Ala Ser Phe Leu Glu Gln Ile Met Ala Pro
          165          170          175
Leu Gln Pro Ser Thr Ser Arg Ala His Lys Leu Pro Leu Arg Arg Gln
          180          185          190
Pro Gly Leu Leu His Leu Gln Ser Cys Gly Asp Leu His Thr Ile Thr
          195          200          205
Pro Ala Gly Arg Pro Arg Ala Glu Arg Arg Pro Arg Arg Val Glu Ala
          210          215          220
Glu Arg Ser His Ser Leu Ile Gly Val Ile Arg Glu Thr Val Leu *
225          230          235          239

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<210> 1727

<211> 238

<212> PRT

<213> Homo sapiens

<400> 1727

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Met Thr Cys Phe Gly Pro Tyr Pro Ile Gly Thr Gly Leu Gln Gly Ile
 1          5          10          15
Thr Leu Cys Cys Phe Pro Ser Phe Cys Lys Met Lys Ser Arg Met Cys
          20          25          30
Met Ala Ile Ser Ile Cys Gln Met Leu Ser Met Leu Ser Phe Val Val
          35          40          45
Cys Ala Phe Arg Tyr Arg His Met Phe Lys Arg Gly Trp Pro Met Gly
          50          55          60
Thr Cys Cys Leu Phe Leu Pro Thr Ala Ala Pro Val Leu Ser Cys Glu
 65          70          75          80
Ala Ala Thr Gln Thr Glu Arg Arg Leu Asp Leu Ala Ala Val Thr Leu
          85          90          95
Arg Arg Gly Leu Arg Ser Arg Ala Ser Arg Cys Arg Pro Arg Ser Leu
          100          105          110
Ile Asp Tyr Lys Ser Tyr Met Asp Thr Lys Leu Leu Val Ala Arg Phe
          115          120          125
Leu Glu Gln Ser Ser Cys Thr Met Thr Pro Asp Ile His Glu Leu Val
          130          135          140
Glu Asn Ile Lys Ser Val Leu Lys Ser Asp Glu Glu His Met Glu Glu
145          150          155          160
Ala Ile Thr Ser Ala Ser Phe Leu Glu Gln Ile Met Ala Pro Leu Gln
          165          170          175

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Pro	Ser	Thr	Ser	Arg	Ala	His	Lys	Leu	Pro	Ser	Arg	Arg	Gln	Pro	Gly
			180					185					190		
Leu	Leu	His	Leu	Gln	Ser	Cys	Gly	Asp	Leu	His	Thr	Phe	Thr	Pro	Ala
		195					200					205			
Gly	Arg	Pro	Arg	Ala	Glu	Arg	Arg	Pro	Arg	Arg	Val	Glu	Ala	Glu	Arg
	210					215					220				
Pro	His	Ser	Leu	Ile	Gly	Val	Ile	Arg	Glu	Thr	Val	Leu	*		
225					230					235		237			

<210> 1728
 <211> 106
 <212> PRT
 <213> Homo sapiens

<400> 1728

Met	Arg	Gly	Ala	Thr	Arg	Val	Ser	Ile	Met	Leu	Leu	Leu	Val	Thr	Val
1				5					10					15	
Ser	Asp	Cys	Ala	Val	Ile	Thr	Gly	Ala	Cys	Glu	Arg	Asp	Val	Gln	Cys
			20					25					30		
Gly	Ala	Gly	Thr	Cys	Cys	Ala	Ile	Ser	Leu	Trp	Leu	Arg	Gly	Leu	Arg
		35					40					45			
Met	Cys	Thr	Pro	Leu	Gly	Arg	Glu	Gly	Glu	Glu	Cys	His	Pro	Gly	Ser
	50					55					60				
His	Lys	Ile	Pro	Phe	Phe	Arg	Lys	Arg	Lys	His	His	Thr	Cys	Pro	Cys
	65				70					75					80
Leu	Pro	Asn	Leu	Leu	Cys	Ser	Arg	Phe	Pro	Asp	Gly	Arg	Tyr	Arg	Cys
				85					90						95
Ser	Met	Asp	Leu	Lys	Asn	Ile	Asn	Phe	*						
			100					105							

<210> 1729
 <211> 243
 <212> PRT
 <213> Homo sapiens

<400> 1729

Met	Leu	Thr	Arg	Lys	Ile	Lys	Leu	Trp	Asp	Ile	Asn	Ala	His	Ile	Thr
1				5					10					15	
Cys	Arg	Leu	Cys	Ser	Gly	Tyr	Leu	Ile	Asp	Ala	Thr	Thr	Val	Thr	Glu
			20					25					30		
Cys	Leu	His	Thr	Phe	Cys	Arg	Ser	Cys	Leu	Val	Lys	Tyr	Leu	Glu	Glu
		35					40					45			
Asn	Ile	Thr	Cys	Pro	Thr	Cys	Arg	Ile	Val	Ile	His	Gln	Ser	His	Pro
	50					55					60				
Leu	Gln	Tyr	Ile	Gly	His	Asp	Arg	Thr	Met	Gln	Asp	Ile	Val	Tyr	Lys
	65				70					75					80
Leu	Val	Pro	Gly	Leu	Gln	Glu	Ala	Glu	Met	Arg	Lys	Gln	Arg	Glu	Phe
				85					90					95	
Tyr	His	Lys	Leu	Gly	Met	Glu	Val	Pro	Gly	Asp	Ile	Lys	Gly	Glu	Thr
			100					105					110		
Cys	Ser	Ala	Lys	Gln	His	Leu	Asp	Ser	His	Arg	Asn	Gly	Glu	Thr	Lys
		115					120					125			
Ala	Asp	Asp	Ser	Ser	Asn	Lys	Glu	Ala	Ala	Glu	Glu	Lys	Pro	Glu	Glu
	130					135					140				
Asp	Asn	Asp	Tyr	His	Arg	Ser	Asp	Glu	Gln	Val	Ser	Ile	Cys	Leu	Glu
	145				150					155					160
Cys	Asn	Ser	Ser	Lys	Leu	Arg	Gly	Leu	Lys	Arg	Lys	Trp	Ile	Arg	Cys
				165					170						175

Ser	Ala	Gln	Ala	Thr	Val	Leu	His	Leu	Lys	Lys	Phe	Ile	Ala	Lys	Lys
			180					185					190		
Leu	Asn	Leu	Ser	Ser	Phe	Asn	Glu	Leu	Asp	Ile	Leu	Cys	Asn	Glu	Glu
		195					200					205			
Ile	Leu	Gly	Lys	Asp	His	Thr	Leu	Lys	Phe	Val	Val	Val	Thr	Arg	Trp
	210					215					220				
Arg	Phe	Lys	Lys	Ala	Pro	Leu	Leu	Leu	His	Tyr	Arg	Pro	Lys	Met	Asp
225					230					235					240
Leu	Leu	*													
	242														

<210> 1730

<211> 378

<212> PRT

<213> Homo sapiens

<400> 1730

Met	Pro	His	Glu	Val	Val	Arg	Asp	Glu	Asn	Ser	Ser	Val	Tyr	Ala	Glu
1				5					10					15	
Val	Ser	Arg	Leu	Leu	Leu	Ala	Thr	Gly	His	Trp	Lys	Arg	Leu	Arg	Arg
			20					25					30		
Asp	Asn	Pro	Arg	Phe	Asn	Leu	Met	Leu	Gly	Glu	Arg	Asn	Arg	Leu	Pro
		35				40						45			
Phe	Gly	Arg	Leu	Gly	His	Glu	Pro	Gly	Leu	Val	Gln	Leu	Val	Asn	Tyr
	50				55						60				
Tyr	Arg	Gly	Ala	Asp	Lys	Leu	Cys	Arg	Lys	Ala	Ser	Leu	Val	Lys	Leu
65					70					75					80
Ile	Lys	Thr	Ser	Pro	Glu	Leu	Ala	Glu	Ser	Cys	Thr	Trp	Phe	Pro	Glu
				85					90					95	
Ser	Tyr	Val	Ile	Tyr	Pro	Thr	Asn	Leu	Lys	Thr	Pro	Val	Ala	Pro	Ala
		100						105					110		
Gln	Asn	Gly	Ile	Gln	Pro	Pro	Ile	Ser	Asn	Ser	Arg	Thr	Asp	Glu	Arg
	115						120					125			
Glu	Phe	Phe	Leu	Ala	Ser	Tyr	Asn	Arg	Lys	Lys	Glu	Asp	Gly	Glu	Gly
	130					135					140				
Asn	Val	Trp	Ile	Ala	Lys	Ser	Ser	Ala	Gly	Ala	Lys	Gly	Glu	Gly	Ile
145					150					155					160
Leu	Ile	Ser	Ser	Glu	Ala	Ser	Glu	Leu	Leu	Asp	Phe	Ile	Asp	Asn	Gln
				165				170						175	
Gly	Gln	Val	His	Val	Ile	Gln	Lys	Tyr	Leu	Glu	His	Pro	Leu	Leu	Leu
			180					185					190		
Glu	Pro	Gly	His	Arg	Lys	Phe	Asp	Ile	Arg	Ser	Trp	Val	Leu	Val	Asp
	195						200					205			
His	Gln	Tyr	Asn	Ile	Tyr	Leu	Tyr	Arg	Glu	Gly	Val	Leu	Arg	Thr	Ala
	210					215					220				
Ser	Glu	Pro	Tyr	His	Val	Asp	Asn	Phe	Gln	Asp	Lys	Thr	Cys	His	Leu
225					230					235					240
Thr	Asn	His	Cys	Ile	Gln	Lys	Glu	Tyr	Ser	Lys	Asn	Tyr	Gly	Lys	Tyr
				245					250					255	
Glu	Glu	Gly	Asn	Glu	Met	Phe	Phe	Lys	Glu	Phe	Asn	Gln	Tyr	Leu	Thr
			260					265					270		
Ser	Ala	Leu	Asn	Ile	Thr	Leu	Glu	Ser	Ser	Ile	Leu	Leu	Gln	Ile	Lys
	275						280						285		
His	Ile	Ile	Arg	Asn	Cys	Leu	Leu	Ser	Val	Glu	Pro	Ala	Ile	Ser	Thr
	290					295					300				
Lys	His	Leu	Pro	Tyr	Gln	Ser	Phe	Gln	Leu	Phe	Gly	Phe	Asp	Phe	Met
305					310					315					320
Val	Asp	Glu	Glu	Leu	Lys	Val	Trp	Leu	Ile	Glu	Val	Asn	Gly	Ala	Pro
				325					330					335	
Ala	Cys	Ala	Gln	Lys	Leu	Tyr	Ala	Glu	Leu	Cys	Gln	Gly	Ile	Val	Asp
			340					345					350		

Ile Ala Ile Ser Ser Val Phe Pro Pro Pro Asp Val Glu Gln Pro Gln
 355 360 365
 Thr Gln Pro Ala Ala Phe Ile Lys Leu *
 370 375 377

<210> 1731
 <211> 221
 <212> PRT
 <213> Homo sapiens

<400> 1731
 Met Ala Leu Ala Leu Ala Ala Leu Ala Ala Val Glu Pro Ala Cys Gly
 1 5 10 15
 Ser Arg Tyr Gln Gln Leu Gln Asn Glu Glu Glu Ser Gly Glu Pro Glu
 20 25 30
 Gln Ala Ala Gly Asp Ala Pro Pro Pro Tyr Ser Ser Ile Ser Ala Glu
 35 40 45
 Ser Ala Ala Tyr Phe Asp Tyr Lys Asp Glu Ser Gly Phe Pro Lys Pro
 50 55 60
 Pro Ser Tyr Asn Val Ala Thr Thr Leu Pro Ser Tyr Asp Glu Ala Glu
 65 70 75 80
 Arg Thr Lys Ala Glu Ala Thr Ile Pro Leu Val Pro Gly Arg Asp Glu
 85 90 95
 Asp Phe Val Gly Arg Asp Asp Phe Asp Asp Ala Asp Gln Leu Arg Ile
 100 105 110
 Gly Asn Asp Gly Ile Phe Met Leu Thr Phe Phe Met Ala Phe Leu Phe
 115 120 125
 Asn Trp Ile Gly Phe Phe Leu Ser Phe Cys Leu Thr Thr Ser Ala Ala
 130 135 140
 Gly Arg Tyr Gly Ala Ile Ser Gly Phe Gly Leu Ser Leu Ile Lys Trp
 145 150 155 160
 Ile Leu Ile Val Arg Phe Ser Thr Tyr Phe Pro Gly Tyr Phe Asp Gly
 165 170 175
 Gln Tyr Trp Leu Trp Trp Val Phe Leu Val Leu Gly Phe Leu Leu Phe
 180 185 190
 Leu Arg Gly Phe Ile Asn Tyr Ala Lys Val Arg Lys Met Pro Glu Thr
 195 200 205
 Phe Ser Asn Leu Pro Arg Thr Arg Val Leu Phe Ile Tyr
 210 215 220 221

<210> 1732
 <211> 424
 <212> PRT
 <213> Homo sapiens

<400> 1732
 Met Ala Leu Ala Ser Gly Pro Ala Arg Arg Ala Leu Ala Gly Ser Gly
 1 5 10 15
 Gln Leu Gly Leu Gly Gly Phe Gly Ala Pro Arg Arg Gly Ala Tyr Glu
 20 25 30
 Trp Gly Val Arg Ser Thr Arg Lys Ser Glu Pro Pro Pro Leu Asp Arg
 35 40 45
 Val Tyr Glu Ile Pro Gly Leu Glu Pro Ile Thr Phe Ala Gly Lys Met
 50 55 60
 His Phe Val Pro Trp Leu Ala Arg Pro Ile Phe Pro Pro Trp Asp Arg
 65 70 75 80
 Gly Tyr Lys Asp Pro Arg Phe Tyr Arg Ser Pro Pro Leu His Glu His
 85 90 95

Pro	Leu	Tyr	Lys	Asp	Gln	Ala	Cys	Tyr	Ile	Phe	His	His	Arg	Cys	Arg
			100					105					110		
Leu	Leu	Glu	Gly	Val	Lys	Gln	Ala	Leu	Trp	Leu	Thr	Lys	Thr	Lys	Leu
		115					120					125			
Ile	Glu	Gly	Leu	Pro	Glu	Lys	Val	Leu	Ser	Leu	Val	Asp	Asp	Pro	Arg
	130					135					140				
Asn	His	Ile	Glu	Asn	Gln	Asp	Glu	Cys	Val	Leu	Asn	Val	Ile	Ser	His
145					150					155					160
Ala	Arg	Leu	Trp	Gln	Thr	Thr	Glu	Glu	Ile	Pro	Lys	Arg	Glu	Thr	Tyr
			165					170					175		
Cys	Pro	Val	Ile	Val	Asp	Asn	Leu	Ile	Gln	Leu	Cys	Lys	Ser	Gln	Ile
		180					185					190			
Leu	Lys	His	Pro	Ser	Leu	Ala	Arg	Arg	Ile	Cys	Val	Gln	Asn	Ser	Thr
	195					200						205			
Phe	Ser	Ala	Thr	Trp	Asn	Arg	Glu	Ser	Leu	Leu	Leu	Gln	Val	Arg	Gly
	210				215						220				
Ser	Gly	Gly	Ala	Arg	Leu	Ser	Thr	Lys	Asp	Pro	Leu	Pro	Thr	Ile	Ala
225					230				235						240
Ser	Arg	Glu	Glu	Ile	Glu	Ala	Thr	Lys	Asn	His	Val	Leu	Glu	Thr	Phe
			245					250					255		
Tyr	Pro	Ile	Ser	Pro	Ile	Ile	Asp	Leu	His	Glu	Cys	Asn	Ile	Tyr	Asp
		260					265					270			
Val	Lys	Asn	Asp	Thr	Gly	Phe	Gln	Glu	Gly	Tyr	Pro	Tyr	Pro	Tyr	Pro
	275					280					285				
His	Thr	Leu	Tyr	Leu	Leu	Asp	Lys	Ala	Asn	Leu	Arg	Pro	His	Arg	Leu
	290					295					300				
Gln	Pro	Asp	Gln	Leu	Arg	Ala	Lys	Met	Ile	Leu	Phe	Ala	Phe	Gly	Ser
305					310					315					320
Ala	Leu	Ala	Gln	Ala	Arg	Leu	Leu	Tyr	Gly	Asn	Asp	Ala	Lys	Val	Leu
			325					330					335		
Glu	Gln	Pro	Val	Val	Val	Gln	Ser	Val	Gly	Thr	Asp	Gly	Arg	Val	Phe
		340						345				350			
His	Phe	Leu	Val	Phe	Gln	Leu	Asn	Thr	Thr	Asp	Leu	Asp	Cys	Asn	Glu
	355					360				365					
Gly	Val	Lys	Asn	Leu	Ala	Trp	Val	Asp	Ser	Asp	Gln	Leu	Leu	Tyr	Gln
	370					375				380					
His	Phe	Trp	Cys	Leu	Pro	Val	Ile	Lys	Lys	Arg	Val	Val	Val	Glu	Pro
385					390					395					400
Val	Gly	Pro	Val	Gly	Phe	Lys	Pro	Glu	Thr	Phe	Arg	Lys	Phe	Leu	Ala
			405					410					415		
Leu	Tyr	Leu	His	Gly	Ala	Ala	*								
		420				423									

<210> 1733

<211> 321

<212> PRT

<213> Homo sapiens

<400> 1733

Met	Val	Gly	Tyr	Asp	Pro	Lys	Pro	Asp	Gly	Arg	Asn	Asn	Thr	Lys	Phe
1				5					10					15	
Gln	Val	Ala	Val	Ala	Gly	Ser	Val	Ser	Gly	Leu	Val	Thr	Arg	Ala	Leu
		20						25					30		
Ile	Ser	Pro	Phe	Asp	Val	Ile	Lys	Ile	Arg	Phe	Gln	Leu	Gln	His	Glu
	35					40						45			
Arg	Leu	Ser	Arg	Ser	Asp	Pro	Ser	Ala	Lys	Tyr	His	Gly	Ile	Leu	Gln
	50					55				60					
Ala	Ser	Arg	Gln	Ile	Leu	Gln	Glu	Glu	Gly	Pro	Thr	Ala	Phe	Trp	Lys
65					70				75						80
Gly	His	Val	Pro	Ala	Gln	Ile	Leu	Ser	Ile	Gly	Tyr	Gly	Ala	Val	Gln
				85					90					95	

Phe	Leu	Ser	Phe	Glu	Met	Leu	Thr	Glu	Leu	Val	His	Arg	Gly	Ser	Val
			100					105					110		
Tyr	Asp	Ala	Arg	Glu	Phe	Ser	Val	His	Phe	Val	Cys	Gly	Gly	Leu	Ala
		115					120					125			
Ala	Cys	Met	Ala	Thr	Leu	Thr	Val	His	Pro	Val	Asp	Val	Leu	Arg	Thr
		130					135				140				
Arg	Phe	Ala	Ala	Gln	Gly	Glu	Pro	Lys	Val	Tyr	Asn	Thr	Leu	Arg	His
145					150					155					160
Ala	Val	Gly	Thr	Met	Tyr	Arg	Ser	Glu	Gly	Pro	Gln	Val	Phe	Tyr	Lys
				165					170					175	
Gly	Leu	Ala	Pro	Thr	Leu	Ile	Ala	Ile	Phe	Pro	Tyr	Ala	Gly	Leu	Gln
			180					185					190		
Phe	Ser	Cys	Tyr	Ser	Ser	Leu	Lys	His	Leu	Tyr	Lys	Trp	Ala	Ile	Pro
		195					200					205			
Ala	Glu	Gly	Lys	Lys	Asn	Glu	Asn	Leu	Gln	Asn	Leu	Leu	Cys	Gly	Ser
		210					215				220				
Gly	Ala	Gly	Val	Ile	Ser	Lys	Thr	Leu	Thr	Tyr	Pro	Leu	Asp	Leu	Phe
225					230					235					240
Lys	Lys	Arg	Leu	Gln	Val	Gly	Gly	Phe	Glu	His	Ala	Arg	Ala	Ala	Phe
				245					250					255	
Gly	Gln	Val	Arg	Arg	Tyr	Lys	Gly	Leu	Met	Asp	Cys	Ala	Lys	Gln	Val
			260					265					270		
Leu	Gln	Lys	Glu	Gly	Ala	Leu	Gly	Phe	Phe	Lys	Gly	Leu	Ser	Pro	Ser
		275					280					285			
Leu	Leu	Lys	Ala	Ala	Leu	Ser	Thr	Gly	Phe	Met	Phe	Phe	Ser	Tyr	Glu
		290				295					300				
Phe	Phe	Cys	Asn	Val	Phe	His	Cys	Met	Asn	Arg	Thr	Ala	Ser	Gln	Arg
305					310					315					320

★

<210> 1734
 <211> 498
 <212> PRT
 <213> Homo sapiens

<400> 1734

Met	Asp	Pro	Leu	Gly	Ala	Pro	Ser	Gln	Phe	Val	Asp	Val	Asp	Thr	Leu
1				5					10					15	
Pro	Ser	Trp	Gly	Asp	Ser	Cys	Gln	Asp	Glu	Leu	Asn	Ser	Ser	Asp	Thr
			20					25					30		
Thr	Ala	Glu	Ile	Phe	Gln	Glu	Asp	Thr	Val	Arg	Ser	Pro	Phe	Leu	Tyr
		35					40					45			
Asn	Lys	Asp	Val	Asn	Gly	Lys	Val	Val	Leu	Trp	Lys	Gly	Asp	Val	Ala
		50				55					60				
Leu	Leu	Asn	Cys	Thr	Ala	Ile	Val	Asn	Thr	Ser	Asn	Glu	Ser	Leu	Thr
		65			70				75					80	
Asp	Lys	Asn	Pro	Val	Ser	Glu	Ser	Ile	Phe	Met	Leu	Ala	Gly	Pro	Asp
				85					90					95	
Leu	Lys	Glu	Asp	Leu	Gln	Lys	Leu	Lys	Gly	Cys	Arg	Thr	Gly	Glu	Ala
			100					105					110		
Lys	Leu	Thr	Lys	Gly	Phe	Asn	Leu	Ala	Ala	Arg	Phe	Ile	Ile	His	Thr
		115					120					125			
Val	Gly	Pro	Lys	Tyr	Lys	Ser	Arg	Tyr	Arg	Thr	Ala	Ala	Glu	Ser	Ser
		130				135					140				
Leu	Tyr	Ser	Cys	Tyr	Arg	Asn	Val	Leu	Gln	Leu	Ala	Lys	Glu	Gln	Ser
145					150					155					160
Met	Ser	Ser	Val	Gly	Phe	Cys	Val	Ile	Asn	Ser	Ala	Lys	Arg	Gly	Tyr
				165					170					175	
Pro	Leu	Glu	Asp	Ala	Thr	His	Ile	Ala	Leu	Arg	Thr	Val	Arg	Arg	Phe
				180					185					190	

Leu Glu Ile His Gly Glu Thr Ile Glu Lys Val Val Phe Ala Val Ser
 195 200 205
 Asp Leu Glu Glu Gly Thr Tyr Gln Lys Leu Leu Pro Leu Tyr Phe Pro
 210 215 220
 Arg Ser Leu Lys Glu Glu Asn Arg Ser Leu Pro Tyr Leu Pro Ala Asp
 225 230 235 240
 Ile Gly Asn Ala Glu Gly Glu Pro Val Val Pro Glu Arg Gln Ile Arg
 245 250 255
 Ile Ser Glu Lys Pro Gly Ala Pro Glu Asp Asn Gln Glu Glu Glu Asp
 260 265 270
 Glu Gly Leu Gly Val Asp Leu Ser Phe Ile Gly Ser His Ala Phe Ala
 275 280 285
 Arg Met Glu Gly Asp Ile Asp Lys Gln Arg Lys Leu Ile Leu Gln Gly
 290 295 300
 Gln Leu Ser Glu Ala Ala Leu Gln Lys Gln His Gln Arg Asn Tyr Asn
 305 310 315 320
 Arg Trp Leu Cys Gln Ala Arg Ala Glu Asp Leu Ser Asp Ile Ala Ser
 325 330 335
 Leu Lys Ala Leu Tyr Gln Thr Gly Val Asp Asn Cys Gly Arg Thr Val
 340 345 350
 Met Val Val Val Gly Arg Asn Ile Pro Val Thr Leu Ile Asp Met Asp
 355 360 365
 Lys Ala Leu Leu Tyr Phe Ile His Val Met Asp His Ile Ala Val Lys
 370 375 380
 Glu Tyr Val Leu Val Tyr Phe His Thr Leu Thr Ser Glu Tyr Asn His
 385 390 395 400
 Leu Asp Ser Asp Phe Leu Lys Lys Leu Tyr Asp Val Val Asp Val Lys
 405 410 415
 Tyr Lys Arg Asn Leu Lys Ala Val Tyr Phe Val His Pro Thr Phe Arg
 420 425 430
 Ser Lys Val Ser Thr Trp Phe Phe Thr Thr Phe Ser Val Ser Gly Leu
 435 440 445
 Lys Asp Lys Ile His His Val Asp Ser Leu His Gln Leu Phe Ser Ala
 450 455 460
 Ile Ser Pro Glu Gln Ile Asp Phe Pro Pro Phe Val Leu Glu Tyr Asp
 465 470 475 480
 Ala Arg Glu Asn Gly Pro Tyr Tyr Thr Ser Tyr Pro Pro Ser Pro Asp
 485 490 495
 Leu *
 497

<210> 1735

<211> 425

<212> PRT

<213> Homo sapiens

<400> 1735

Met Ala Pro Glu Glu Asp Ala Gly Gly Glu Ala Leu Gly Gly Ser Phe
 1 5 10 15
 Trp Glu Ala Gly Asn Tyr Arg Arg Thr Val Gln Arg Val Glu Asp Gly
 20 25 30
 His Arg Leu Cys Gly Asp Leu Val Ser Cys Phe Gln Glu Arg Ala Arg
 35 40 45
 Ile Glu Lys Ala Tyr Ala Gln Gln Leu Ala Asp Trp Ala Arg Lys Trp
 50 55 60
 Arg Gly Thr Val Glu Lys Gly Pro Gln Tyr Gly Thr Leu Glu Lys Ala
 65 70 75 80
 Trp His Ala Phe Phe Thr Ala Ala Glu Arg Leu Ser Ala Leu His Leu
 85 90 95
 Glu Val Arg Glu Lys Leu Gln Gly Gln Asp Ser Glu Arg Val Arg Ala
 100 105 110

Trp Gln Arg Gly Ala Phe His Arg Pro Val Leu Gly Gly Phe Arg Glu
 115 120 125
 Ser Arg Ala Ala Glu Asp Gly Phe Arg Lys Ala Gln Lys Pro Trp Leu
 130 135 140
 Lys Arg Leu Lys Glu Val Glu Ala Ser Lys Lys Ser Tyr His Ala Ala
 145 150 155 160
 Arg Lys Asp Glu Lys Thr Ala Gln Thr Arg Glu Ser His Ala Lys Ala
 165 170 175
 Asp Ser Ala Val Ser Gln Glu Gln Leu Arg Lys Leu Gln Glu Arg Val
 180 185 190
 Glu Arg Cys Ala Lys Glu Ala Glu Lys Thr Lys Ala Gln Tyr Glu Gln
 195 200 205
 Thr Leu Ala Glu Leu His Arg Tyr Thr Pro Arg Tyr Met Glu Asp Met
 210 215 220
 Glu Gln Ala Phe Glu Thr Cys Gln Ala Ala Glu Arg Gln Arg Leu Leu
 225 230 235 240
 Phe Phe Lys Asp Met Leu Leu Thr Leu His Gln His Leu Asp Leu Ser
 245 250 255
 Ser Ser Glu Lys Phe His Glu Leu His Arg Asp Leu His Gln Gly Ile
 260 265 270
 Glu Ala Ala Ser Asp Glu Glu Asp Leu Arg Trp Trp Arg Ser Thr His
 275 280 285
 Gly Pro Gly Met Ala Met Asn Trp Pro Gln Phe Glu Glu Trp Ser Leu
 290 295 300
 Asp Thr Gln Arg Thr Ile Ser Arg Lys Glu Lys Gly Gly Arg Ser Pro
 305 310 315 320
 Asp Glu Val Thr Leu Thr Ser Ile Val Pro Thr Arg Asp Gly Thr Ala
 325 330 335
 Pro Pro Pro Gln Ser Pro Gly Ser Pro Gly Thr Gly Gln Asp Glu Glu
 340 345 350
 Trp Ser Asp Glu Glu Ser Pro Arg Lys Ala Ala Thr Gly Val Arg Val
 355 360 365
 Arg Ala Leu Tyr Asp Tyr Ala Gly Gln Glu Ala Asp Glu Leu Ser Phe
 370 375 380
 Arg Ala Gly Glu Glu Leu Leu Lys Met Ser Glu Glu Asp Glu Gln Gly
 385 390 395 400
 Trp Cys Gln Gly Gln Leu Gln Ser Gly Arg Ile Gly Leu Tyr Pro Ala
 405 410 415
 Asn Tyr Val Glu Cys Val Gly Ala *
 420 424

<210> 1736

<211> 602

<212> PRT

<213> Homo sapiens

<400> 1736

Met Ala Tyr Asp Asp Ser Val Lys Lys Glu Asp Cys Phe Asp Gly Asp
 1 5 10 15
 His Thr Phe Glu Asp Ile Gly Leu Ala Ala Gly Arg Ser Gln Arg Glu
 20 25 30
 Lys Lys Arg Ser Tyr Lys Asp Phe Leu Arg Glu Glu Glu Glu Ile Ala
 35 40 45
 Ala Gln Val Arg Asn Ser Ser Lys Lys Lys Leu Lys Asp Ser Glu Leu
 50 55 60
 Tyr Phe Leu Gly Thr Asp Thr His Lys Lys Lys Arg Lys His Ser Ser
 65 70 75 80
 Asp Asp Tyr Tyr Tyr Gly Asp Ile Ser Ser Leu Glu Ser Ser Gln Lys
 85 90 95
 Lys Lys Lys Lys Ser Ser Pro Gln Ser Thr Asp Thr Ala Met Asp Leu
 100 105 110

3588

<210> 1737
 <211> 211
 <212> PRT
 <213> Homo sapiens

<400> 1737
 Met Ser Arg Met Phe Cys Gln Ala Ala Arg Val Asp Leu Thr Leu Asp
 1 5 10 15
 Pro Asp Thr Ala His Pro Ala Leu Met Leu Ser Pro Asp Arg Arg Gly
 20 25 30
 Val Arg Leu Ala Glu Arg Arg Gln Glu Val Ala Asp His Pro Lys Arg
 35 40 45
 Phe Ser Ala Asp Cys Cys Val Leu Gly Ala Gln Gly Phe Arg Ser Gly
 50 55 60
 Arg His Tyr Trp Glu Val Glu Val Gly Gly Arg Arg Gly Trp Ala Val
 65 70 75 80
 Gly Ala Ala Arg Glu Ser Thr His His Lys Glu Lys Val Gly Pro Gly
 85 90 95
 Gly Ser Ser Val Gly Ser Gly Asp Ala Ser Ser Ser Arg His His His
 100 105 110
 Arg Arg Arg Arg Leu His Leu Pro Gln Gln Pro Leu Leu Gln Arg Glu
 115 120 125
 Val Trp Cys Val Gly Thr Asn Gly Lys Arg Tyr Gln Ala Gln Ser Ser
 130 135 140
 Thr Glu Gln Thr Leu Leu Ser Pro Ser Glu Lys Pro Arg Arg Phe Gly
 145 150 155 160
 Val Tyr Leu Asp Tyr Glu Ala Gly Arg Leu Gly Phe Tyr Asn Ala Glu
 165 170 175
 Thr Leu Ala His Val His Thr Phe Ser Ala Ala Phe Leu Gly Glu Arg
 180 185 190
 Val Phe Pro Phe Phe Arg Val Leu Ser Lys Gly Thr Arg Ile Lys Leu
 195 200 205
 Cys Pro *
 210

<210> 1738
 <211> 351
 <212> PRT
 <213> Homo sapiens

<400> 1738
 Met Ser Lys Gly Leu Pro Glu Thr Arg Thr Asp Ala Ala Met Ser Glu
 1 5 10 15
 Leu Val Pro Glu Pro Arg Pro Lys Pro Ala Val Pro Met Lys Pro Met
 20 25 30
 Ser Ile Asn Ser Asn Leu Leu Gly Tyr Ile Gly Ile Asp Thr Ile Ile
 35 40 45
 Glu Gln Met Arg Lys Lys Thr Met Lys Thr Gly Phe Asp Phe Asn Ile
 50 55 60
 Met Val Val Gly Gln Ser Gly Leu Gly Lys Ser Thr Leu Val Asn Thr
 65 70 75 80
 Leu Phe Lys Ser Gln Val Ser Arg Lys Ala Ser Ser Trp Asn Arg Glu
 85 90 95
 Glu Lys Ile Pro Lys Thr Val Glu Ile Lys Ala Ile Gly His Val Ile
 100 105 110
 Glu Glu Gly Gly Val Lys Met Lys Leu Thr Val Ile Asp Thr Pro Gly
 115 120 125
 Phe Gly Asp Gln Ile Asn Asn Glu Asn Cys Trp Glu Pro Ile Glu Lys
 130 135 140

Tyr	Ile	Asn	Glu	Gln	Tyr	Glu	Lys	Phe	Leu	Lys	Glu	Glu	Val	Asn	Ile
145					150					155					160
Ala	Arg	Lys	Lys	Arg	Ile	Pro	Asp	Thr	Arg	Val	His	Cys	Cys	Leu	Tyr
				165					170						175
Phe	Ile	Ser	Pro	Thr	Gly	His	Ser	Leu	Arg	Pro	Leu	Asp	Leu	Glu	Phe
			180					185					190		
Met	Lys	His	Leu	Ser	Lys	Val	Val	Asn	Ile	Ile	Pro	Val	Ile	Ala	Lys
		195					200					205			
Ala	Asp	Thr	Met	Thr	Leu	Glu	Glu	Lys	Ser	Glu	Phe	Lys	Gln	Arg	Val
210						215					220				
Arg	Lys	Glu	Leu	Glu	Val	Asn	Gly	Ile	Glu	Phe	Tyr	Pro	Gln	Lys	Glu
225					230					235					240
Phe	Asp	Glu	Asp	Leu	Glu	Asp	Lys	Thr	Glu	Asn	Asp	Lys	Ile	Arg	Gln
				245					250						255
Glu	Ser	Met	Pro	Phe	Ala	Val	Val	Gly	Ser	Asp	Lys	Glu	Tyr	Gln	Val
			260					265					270		
Asn	Gly	Lys	Arg	Val	Leu	Gly	Arg	Lys	Thr	Pro	Trp	Gly	Ile	Ile	Glu
		275					280					285			
Val	Glu	Asn	Leu	Asn	His	Cys	Glu	Phe	Ala	Leu	Leu	Arg	Asp	Phe	Val
290						295					300				
Ile	Arg	Thr	His	Leu	Gln	Asp	Leu	Lys	Glu	Val	Thr	His	Asn	Ile	His
305					310					315					320
Tyr	Glu	Thr	Tyr	Arg	Ala	Lys	Arg	Leu	Asn	Asp	Asn	Gly	Gly	Leu	Pro
				325					330					335	
Pro	Val	Ser	Val	Asp	Thr	Glu	Glu	Ser	His	Asp	Ser	Asn	Pro	*	
			340					345					350		

<210> 1739

<211> 478

<212> PRT

<213> Homo sapiens

<400> 1739

Met	Leu	Arg	Trp	Leu	Arg	Asp	Phe	Val	Leu	Pro	Thr	Ala	Ala	Cys	Gln
1				5					10					15	
Asp	Ala	Glu	Gln	Pro	Met	Arg	Tyr	Glu	Thr	Leu	Phe	Gln	Ala	Leu	Asp
			20					25					30		
Arg	Asn	Gly	Asp	Gly	Val	Val	Asp	Ile	Gly	Glu	Leu	Gln	Glu	Gly	Leu
		35					40					45			
Arg	Asn	Leu	Gly	Ile	Pro	Leu	Gly	Gln	Asp	Ala	Glu	Glu	Lys	Ile	Phe
		50				55					60				
Thr	Thr	Gly	Asp	Val	Asn	Lys	Asp	Gly	Lys	Leu	Asp	Phe	Glu	Glu	Phe
65					70					75					80
Met	Lys	Tyr	Leu	Lys	Asp	His	Glu	Lys	Lys	Met	Lys	Leu	Ala	Phe	Lys
				85					90					95	
Ser	Leu	Asp	Lys	Asn	Asn	Asp	Gly	Lys	Ile	Glu	Ala	Ser	Glu	Ile	Val
			100					105					110		
Gln	Ser	Leu	Gln	Thr	Leu	Gly	Leu	Thr	Ile	Ser	Glu	Gln	Gln	Ala	Glu
		115					120					125			
Leu	Ile	Leu	Gln	Ser	Ile	Asp	Val	Asp	Gly	Thr	Met	Thr	Val	Asp	Trp
130						135					140				
Asn	Glu	Trp	Arg	Asp	Tyr	Phe	Leu	Phe	Asn	Pro	Val	Thr	Asp	Ile	Glu
145					150					155					160
Glu	Ile	Ile	Arg	Phe	Trp	Lys	His	Ser	Thr	Gly	Ile	Asp	Ile	Gly	Asp
				165					170					175	
Ser	Leu	Thr	Ile	Pro	Asp	Glu	Phe	Thr	Glu	Asp	Glu	Lys	Lys	Ser	Gly
			180					185					190		
Gln	Trp	Trp	Arg	Gln	Leu	Leu	Ala	Gly	Gly	Ile	Ala	Gly	Ala	Val	Ser
		195					200					205			
Arg	Thr	Ser	Thr	Ala	Pro	Leu	Asp	Arg	Leu	Lys	Ile	Met	Met	Gln	Val
210						215						220			

His	Gly	Ser	Lys	Ser	Asp	Lys	Met	Asn	Ile	Phe	Gly	Gly	Phe	Arg	Gln
225					230					235					240
Met	Val	Lys	Glu	Gly	Gly	Ile	Arg	Ser	Leu	Trp	Arg	Gly	Asn	Gly	Thr
				245					250					255	
Asn	Val	Ile	Lys	Ile	Ala	Pro	Glu	Thr	Ala	Val	Lys	Phe	Trp	Ala	Tyr
			260					265					270		
Glu	Gln	Tyr	Lys	Lys	Leu	Leu	Thr	Glu	Glu	Gly	Gln	Lys	Ile	Gly	Thr
	275						280					285			
Phe	Glu	Arg	Phe	Ile	Ser	Gly	Ser	Met	Ala	Gly	Ala	Thr	Ala	Gln	Thr
	290					295				300					
Phe	Ile	Tyr	Pro	Met	Glu	Val	Met	Lys	Thr	Arg	Leu	Ala	Val	Gly	Lys
305					310					315					320
Thr	Gly	Gln	Tyr	Ser	Gly	Ile	Tyr	Asp	Cys	Ala	Lys	Lys	Ile	Leu	Lys
				325				330						335	
His	Glu	Gly	Leu	Gly	Ala	Phe	Tyr	Lys	Gly	Tyr	Val	Pro	Asn	Leu	Leu
			340					345					350		
Gly	Ile	Ile	Pro	Tyr	Ala	Gly	Ile	Asp	Leu	Ala	Val	Tyr	Glu	Leu	Leu
	355						360					365			
Lys	Ser	Tyr	Trp	Leu	Asp	Asn	Phe	Ala	Lys	Asp	Ser	Val	Asn	Pro	Gly
	370					375					380				
Val	Met	Val	Leu	Leu	Gly	Cys	Gly	Ala	Leu	Ser	Ser	Thr	Cys	Gly	Gln
385					390					395					400
Leu	Ala	Ser	Tyr	Pro	Leu	Ala	Leu	Val	Arg	Thr	Arg	Met	Gln	Ala	Gln
				405					410					415	
Ala	Met	Leu	Glu	Gly	Ser	Pro	Gln	Leu	Asn	Met	Val	Gly	Leu	Phe	Arg
			420					425					430		
Arg	Ile	Ile	Ser	Lys	Glu	Gly	Ile	Pro	Gly	Leu	Tyr	Arg	Gly	Ile	Thr
	435						440					445			
Pro	Asn	Phe	Met	Lys	Val	Leu	Pro	Ala	Val	Gly	Ile	Ser	Tyr	Val	Val
	450					455				460					
Tyr	Glu	Asn	Met	Lys	Gln	Thr	Leu	Gly	Val	Thr	Gln	Lys	*		
465					470					475		477			

<210> 1740

<211> 776

<212> PRT

<213> Homo sapiens

<400> 1740

Met	Leu	Ala	Pro	Arg	Gly	Ala	Ala	Val	Leu	Leu	Leu	His	Leu	Val	Leu
1				5					10					15	
Gln	Arg	Trp	Leu	Ala	Ala	Gly	Ala	Gln	Ala	Thr	Pro	Gln	Val	Phe	Asp
			20					25					30		
Leu	Leu	Pro	Ser	Ser	Ser	Gln	Arg	Leu	Asn	Pro	Gly	Ala	Leu	Leu	Pro
		35				40						45			
Val	Leu	Thr	Asp	Pro	Ala	Leu	Asn	Asp	Leu	Tyr	Val	Ile	Ser	Thr	Phe
	50					55				60					
Lys	Leu	Gln	Thr	Lys	Ser	Ser	Ala	Thr	Ile	Phe	Gly	Leu	Tyr	Ser	Ser
65				70						75				80	
Thr	Asp	Asn	Ser	Lys	Tyr	Phe	Glu	Phe	Thr	Val	Met	Gly	Arg	Leu	Ser
			85					90					95		
Lys	Ala	Ile	Leu	Arg	Tyr	Leu	Lys	Asn	Asp	Gly	Lys	Val	His	Leu	Val
			100					105					110		
Val	Phe	Asn	Asn	Leu	Gln	Leu	Ala	Asp	Gly	Arg	Arg	His	Arg	Ile	Leu
		115					120					125			
Leu	Arg	Leu	Ser	Asn	Leu	Gln	Arg	Gly	Ala	Gly	Ser	Leu	Glu	Leu	Tyr
	130					135				140					
Leu	Asp	Cys	Ile	Gln	Val	Asp	Ser	Val	His	Asn	Leu	Pro	Arg	Ala	Phe
145				150						155				160	
Ala	Gly	Pro	Ser	Gln	Lys	Pro	Glu	Thr	Ile	Glu	Leu	Arg	Thr	Phe	Gln
				165					170					175	

Arg	Lys	Pro	Gln	Asp	Phe	Leu	Glu	Glu	Leu	Lys	Leu	Val	Val	Arg	Gly
			180					185					190		
Ser	Leu	Phe	Gln	Val	Ala	Ser	Leu	Gln	Asp	Cys	Phe	Leu	Gln	Gln	Ser
		195					200					205			
Glu	Pro	Leu	Ala	Ala	Thr	Gly	Thr	Gly	Asp	Phe	Asn	Arg	Gln	Phe	Leu
	210					215					220				
Gly	Gln	Met	Thr	Gln	Leu	Asn	Gln	Leu	Leu	Gly	Glu	Val	Lys	Asp	Leu
225					230					235					240
Leu	Arg	Gln	Gln	Val	Lys	Glu	Thr	Ser	Phe	Leu	Arg	Asn	Thr	Ile	Ala
				245					250					255	
Glu	Cys	Gln	Ala	Cys	Gly	Pro	Leu	Lys	Phe	Gln	Ser	Pro	Thr	Pro	Ser
			260					265					270		
Thr	Val	Val	Ala	Pro	Ala	Pro	Pro	Ala	Pro	Pro	Thr	Arg	Pro	Pro	Arg
		275					280					285			
Arg	Cys	Asp	Ser	Asn	Pro	Cys	Phe	Arg	Gly	Val	Gln	Cys	Thr	Asp	Ser
	290					295					300				
Arg	Asp	Gly	Phe	Gln	Cys	Gly	Pro	Cys	Pro	Glu	Gly	Tyr	Thr	Gly	Asn
305					310					315					320
Gly	Ile	Thr	Cys	Ile	Asp	Val	Asp	Glu	Cys	Lys	Tyr	His	Pro	Cys	Tyr
			325					330						335	
Pro	Gly	Val	His	Cys	Ile	Asn	Leu	Ser	Pro	Gly	Phe	Arg	Cys	Asp	Ala
			340					345					350		
Cys	Pro	Val	Gly	Phe	Thr	Gly	Pro	Met	Val	Gln	Gly	Val	Gly	Ile	Ser
		355					360					365			
Phe	Ala	Lys	Ser	Asn	Lys	Gln	Val	Cys	Thr	Asp	Ile	Asp	Glu	Cys	Arg
	370					375					380				
Asn	Gly	Ala	Cys	Val	Pro	Asn	Ser	Ile	Cys	Val	Asn	Thr	Leu	Gly	Ser
385					390					395					400
Tyr	Arg	Cys	Gly	Pro	Cys	Lys	Pro	Gly	Tyr	Thr	Gly	Asp	Gln	Ile	Arg
			405					410						415	
Gly	Cys	Lys	Val	Glu	Arg	Asn	Cys	Arg	Asn	Pro	Glu	Leu	Asn	Pro	Cys
			420					425					430		
Ser	Val	Asn	Ala	Gln	Cys	Ile	Glu	Glu	Arg	Gln	Gly	Asp	Val	Thr	Cys
		435					440					445			
Val	Cys	Gly	Val	Gly	Trp	Ala	Gly	Asp	Gly	Tyr	Ile	Cys	Gly	Lys	Asp
	450					455					460				
Val	Asp	Ile	Asp	Ser	Tyr	Pro	Asp	Glu	Glu	Leu	Pro	Cys	Ser	Ala	Arg
465					470					475					480
Asn	Cys	Lys	Lys	Asp	Asn	Cys	Lys	Tyr	Val	Pro	Asn	Ser	Gly	Gln	Glu
			485					490						495	
Asp	Ala	Asp	Arg	Asp	Gly	Ile	Gly	Asp	Ala	Cys	Asp	Glu	Asp	Ala	Asp
			500					505					510		
Gly	Asp	Gly	Ile	Leu	Asn	Glu	Gln	Asp	Asn	Cys	Val	Leu	Ile	His	Asn
	515						520					525			
Val	Asp	Gln	Arg	Asn	Ser	Asp	Lys	Asp	Ile	Phe	Gly	Asp	Ala	Cys	Asp
	530					535					540				
Asn	Cys	Leu	Ser	Val	Leu	Asn	Asn	Asp	Gln	Lys	Asp	Thr	Asp	Gly	Asp
545					550					555					560
Gly	Arg	Gly	Asp	Ala	Cys	Asp	Asp	Asp	Met	Asp	Gly	Asp	Gly	Ile	Lys
			565						570					575	
Asn	Ile	Leu	Asp	Asn	Cys	Pro	Lys	Phe	Pro	Asn	Arg	Asp	Gln	Arg	Asp
		580						585					590		
Lys	Asp	Gly	Asp	Gly	Val	Gly	Asp	Ala	Cys	Asp	Ser	Cys	Pro	Asp	Val
	595						600					605			
Ser	Asn	Pro	Asn	Gln	Ser	Asp	Val	Asp	Asn	Asp	Leu	Val	Gly	Asp	Ser
	610					615					620				
Cys	Asp	Thr	Asn	Gln	Asp	Ser	Asp	Gly	Asp	Gly	His	Gln	Asp	Ser	Thr
625					630					635					640
Asp	Asn	Cys	Pro	Thr	Val	Ile	Asn	Ser	Ala	Gln	Leu	Asp	Thr	Asp	Lys
			645						650					655	
Asp	Gly	Ile	Gly	Asp	Glu	Cys	Asp	Asp	Asp	Asp	Asp	Asn	Asp	Gly	Ile
		660					665					670			
Pro	Asp	Leu	Val	Pro	Pro	Gly	Pro	Asp	Asn	Cys	Arg	Leu	Val	Pro	Asn
		675					680					685			

Pro Ala Gln Glu Asp Ser Asn Ser Asp Gly Val Gly Asp Ile Cys Glu
690 695 700
Ser Asp Phe Asp Gln Asp Gln Val Ile Asp Arg Ile Asp Val Cys Pro
705 710 715 720
Glu Asn Ala Glu Val Thr Leu Thr Asp Phe Arg Ala Tyr Gln Thr Val
725 730 735
Gly Leu Asp Pro Glu Gly Asp Ala Gln Ile Asp Pro Asn Trp Val Val
740 745 750
Leu Asn Gln Gly Met Glu Ile Val Gln Thr Met Asn Ser Asp Pro Gly
755 760 765
Leu Ala Val Gly Tyr Thr Ala Phe
770 775 776

<210> 1741
<211> 371
<212> PRT
<213> Homo sapiens

<400> 1741
Met Glu Gly Leu Leu His Tyr Ile Asn Pro Ala His Ala Ile Ser Leu
1 5 10 15
Leu Ser Ala Leu Asn Glu Glu Arg Leu Lys Gly Gln Leu Cys Asp Val
20 25 30
Leu Leu Ile Val Gly Asp Gln Lys Phe Arg Ala His Lys Asn Val Leu
35 40 45
Ala Ala Ser Ser Glu Tyr Phe Gln Ser Leu Phe Thr Asn Lys Glu Asn
50 55 60
Glu Ser Gln Thr Val Phe Gln Leu Asp Phe Cys Glu Pro Asp Ala Phe
65 70 75 80
Asp Asn Val Leu Asn Tyr Ile Tyr Ser Ser Ser Leu Phe Val Glu Lys
85 90 95
Ser Ser Leu Ala Ala Val Gln Glu Leu Gly Tyr Ser Leu Gly Ile Ser
100 105 110
Phe Leu Thr Asn Ile Val Ser Lys Thr Pro Gln Ala Pro Phe Pro Thr
115 120 125
Cys Pro Asn Arg Lys Lys Val Phe Val Glu Asp Asp Glu Asn Ser Ser
130 135 140
Gln Lys Arg Ser Val Ile Val Cys Gln Ser Arg Asn Glu Ala Gln Gly
145 150 155 160
Lys Thr Val Ser Gln Asn Gln Pro Asp Val Ser His Thr Ser Arg Pro
165 170 175
Ser Pro Ser Ile Ala Val Lys Ala Asn Thr Asn Lys Pro His Val Pro
180 185 190
Lys Pro Ile Glu Pro Leu His Asn Leu Ser Leu Thr Glu Lys Ser Trp
195 200 205
Pro Lys Asp Ser Ser Val Val Tyr Ala Lys Ser Leu Glu His Ser Gly
210 215 220
Ser Leu Asp Asp Pro Asn Arg Ile Ser Leu Val Lys Arg Asn Ala Val
225 230 235 240
Leu Pro Ser Lys Pro Leu Gln Asp Arg Glu Ala Met Asp Asp Lys Pro
245 250 255
Gly Val Ser Gly Gln Leu Pro Lys Gly Lys Ala Leu Glu Leu Ala Leu
260 265 270
Lys Arg Pro Arg Pro Pro Val Leu Ser Val Cys Ser Ser Ser Glu Thr
275 280 285
Pro Tyr Leu Leu Lys Glu Thr Asn Lys Gly Asn Gly Gln Gly Glu Asp
290 295 300
Arg Asn Leu Leu Tyr Tyr Ser Lys Leu Gly Leu Val Ile Pro Ser Ser
305 310 315 320
Gly Ser Gly Ser Gly Asn Gln Ser Ile Asp Arg Ser Gly Pro Leu Val
325 330 335

Lys Ser Leu Leu Arg Arg Ser Leu Ser Met Asp Ser Gln Val Pro Val
 340 345 350
 Tyr Ser Pro Ser Ile Asp Leu Lys Ser Ser Gln Gly Ile Ile Phe Gly
 355 360 365
 Val Gln *
 370

<210> 1742
 <211> 183
 <212> PRT
 <213> Homo sapiens

<400> 1742
 Met Leu Lys Asn Lys Gly His Ser Ser Lys Lys Asp Asn Leu Ala Val
 1 5 10 15
 Asn Ala Val Ala Leu Gln Asp His Ile Leu His Asp Leu Gln Leu Arg
 20 25 30
 Asn Leu Ser Val Ala Asp His Ser Lys Thr Gln Val Gln Lys Lys Glu
 35 40 45
 Asn Lys Ser Leu Lys Arg Asp Thr Lys Ala Ile Ile Asp Thr Gly Leu
 50 55 60
 Lys Lys Thr Thr Gln Cys Pro Lys Leu Glu Asp Ser Glu Lys Glu Tyr
 65 70 75 80
 Val Leu Asp Pro Lys Pro Pro Pro Leu Thr Leu Ala Gln Lys Leu Gly
 85 90 95
 Leu Ile Gly Pro Pro Pro Pro Pro Leu Ser Ser Asp Glu Trp Glu Lys
 100 105 110
 Val Lys Gln Arg Ser Leu Leu Gln Gly Asp Ser Val Gln Pro Cys Pro
 115 120 125
 Ile Cys Lys Glu Glu Phe Glu Leu Arg Pro Gln Val Phe Ser Ile Arg
 130 135 140
 Gly Cys Cys Phe His Ala Pro Met Cys Ser Thr Lys His Val Phe Arg
 145 150 155 160
 Leu Leu Lys Ser Ser Gln Ile Arg Lys Pro Val Leu Ser Val Glu Arg
 165 170 175
 Thr Ser Ile Lys Pro Glu *
 180 182

<210> 1743
 <211> 296
 <212> PRT
 <213> Homo sapiens

<400> 1743
 Met Ser Ser Asp Gly Glu Pro Leu Ser Arg Met Asp Ser Glu Asp Ser
 1 5 10 15
 Ile Ser Ser Thr Ile Met Asp Val Asp Ser Thr Ile Ser Ser Gly Arg
 20 25 30
 Ser Thr Pro Ala Met Met Asn Gly Gln Gly Ser Thr Thr Ser Ser Ser
 35 40 45
 Lys Asn Ile Ala Tyr Asn Cys Cys Trp Asp Gln Cys Gln Ala Cys Phe
 50 55 60
 Asn Ser Ser Pro Asp Leu Ala Asp His Ile Arg Ser Ile His Val Asp
 65 70 75 80
 Gly Gln Arg Gly Gly Val Phe Val Cys Leu Trp Lys Gly Cys Lys Val
 85 90 95
 Tyr Asn Thr Pro Ser Thr Ser Gln Ser Trp Leu Gln Arg His Met Leu
 100 105 110

Thr	His	Ser	Gly	Asp	Lys	Pro	Phe	Lys	Cys	Val	Val	Gly	Gly	Cys	Asn
		115					120					125			
Ala	Ser	Phe	Ala	Ser	Gln	Gly	Gly	Leu	Ala	Arg	His	Val	Pro	Thr	His
	130					135					140				
Phe	Ser	Gln	Gln	Asn	Ser	Ser	Lys	Val	Ser	Ser	Gln	Pro	Lys	Ala	Lys
145				150						155					160
Glu	Glu	Ser	Pro	Ser	Lys	Ala	Gly	Met	Asn	Lys	Arg	Arg	Lys	Leu	Lys
			165						170					175	
Asn	Lys	Arg	Arg	Arg	Ser	Leu	Pro	Arg	Pro	His	Asp	Phe	Phe	Asp	Ala
			180					185					190		
Gln	Thr	Leu	Asp	Ala	Ile	Arg	His	Arg	Ala	Ile	Cys	Phe	Asn	Leu	Ser
	195						200					205			
Ala	His	Ile	Glu	Ser	Leu	Gly	Lys	Gly	His	Ser	Val	Val	Phe	His	Ser
	210					215					220				
Pro	Val	Ile	Ala	Lys	Arg	Lys	Glu	Asp	Ser	Gly	Lys	Ile	Lys	Leu	Leu
225					230					235					240
Leu	His	Trp	Met	Pro	Glu	Asp	Ile	Leu	His	Asp	Val	Trp	Val	Asn	Glu
			245						250					255	
Ser	Glu	Arg	His	Gln	Leu	Lys	Thr	Lys	Val	Val	His	Leu	Ser	Lys	Leu
			260					265					270		
Pro	Lys	Asp	Thr	Ala	Leu	Leu	Leu	Asp	Pro	Asn	Ile	Tyr	Arg	Thr	Met
	275						280					285			
Pro	Gln	Lys	Arg	Leu	Lys	Arg	*								
	290					295									

<210> 1744

<211> 215

<212> PRT

<213> Homo sapiens

<400> 1744

Met	Asp	Asn	Ala	Gly	Lys	Glu	Arg	Glu	Ala	Val	Gln	Leu	Met	Ala	Glu
1				5					10					15	
Ala	Glu	Lys	Arg	Val	Lys	Ala	Ser	His	Ser	Phe	Leu	Arg	Gly	Leu	Phe
			20					25					30		
Gly	Gly	Asn	Thr	Arg	Ile	Glu	Glu	Ala	Cys	Glu	Met	Tyr	Thr	Arg	Ala
		35				40						45			
Ala	Asn	Met	Phe	Lys	Met	Ala	Lys	Asn	Trp	Ser	Ala	Ala	Gly	Asn	Ala
	50					55				60					
Phe	Cys	Gln	Ala	Ala	Lys	Leu	His	Met	Gln	Leu	Gln	Ser	Lys	His	Asp
65					70					75					80
Ser	Ala	Thr	Ser	Phe	Val	Asp	Ala	Gly	Asn	Ala	Tyr	Lys	Lys	Ala	Asp
			85					90						95	
Pro	Gln	Glu	Ala	Ile	Asn	Cys	Leu	Asn	Ala	Ala	Ile	Asp	Ile	Tyr	Thr
		100						105					110		
Asp	Met	Gly	Arg	Phe	Thr	Ile	Ala	Ala	Lys	His	His	Ile	Thr	Ile	Ala
	115						120					125			
Glu	Ile	Tyr	Glu	Thr	Glu	Leu	Val	Asp	Ile	Glu	Lys	Ala	Ile	Ala	His
	130					135					140				
Tyr	Glu	Gln	Ser	Ala	Asp	Tyr	Tyr	Lys	Gly	Glu	Glu	Ser	Asn	Ser	Ser
145					150					155					160
Ala	Asn	Lys	Cys	Leu	Leu	Lys	Val	Ala	Ala	Tyr	Ala	Ala	Gln	Leu	Glu
			165					170						175	
Gln	Tyr	Gln	Lys	Ala	Ile	Glu	Ile	Tyr	Glu	Gln	Val	Gly	Ala	Asn	Thr
			180					185					190		
Met	Glu	Tyr	Pro	Phe	Val	Glu	Tyr	Arg	Pro	Lys	Asp	Thr	Ser	Ser	Lys
	195						200					205			
Leu	Pro	Phe	Ala	Thr	Leu	*									
	210				214										

<210> 1745
 <211> 164
 <212> PRT
 <213> Homo sapiens

<400> 1745
 Met Ser Arg Arg Ala Pro Gly Ser Arg Leu Ser Ser Gly Gly Gly Gly
 1 5 10 15
 Gly Gly Thr Lys Tyr Pro Arg Ser Trp Asn Asp Trp Gln Pro Arg Thr
 20 25 30
 Asp Ser Ala Ser Ala Asp Pro Asp Asn Leu Lys Tyr Ser Ser Ser Arg
 35 40 45
 Asp Arg Gly Gly Ser Ser Ser Tyr Gly Leu Gln Pro Ser Asn Ser Ala
 50 55 60
 Val Val Ser Arg Gln Arg His Asp Asp Thr Arg Val His Ala Asp Ile
 65 70 75 80
 Gln Asn Asp Glu Lys Gly Gly Tyr Ser Val Asn Gly Gly Ser Gly Glu
 85 90 95
 Asn Thr Tyr Gly Arg Lys Ser Leu Gly Gln Glu Leu Arg Val Asn Asn
 100 105 110
 Val Thr Ser Pro Glu Phe Thr Ser Val Gln His Gly Ser Arg Ala Leu
 115 120 125
 Ala Thr Lys Asp Met Arg Lys Ser Gln Glu Arg Ser Met Ser Tyr Cys
 130 135 140
 Asp Glu Ser Arg Leu Ser Asn Leu Leu Arg Arg Ile Thr Arg Glu Asp
 145 150 155 160
 Asp Arg Asp *
 163

<210> 1746
 <211> 57
 <212> PRT
 <213> Homo sapiens

<400> 1746
 Met Asp His Lys Gln Leu Cys Trp Ser His Pro Gln Lys Ser Gly Gln
 1 5 10 15
 Ser Ser Arg Ser Cys Cys Ile Cys Ser Asn Gln His Gly Leu Ile Trp
 20 25 30
 Lys Tyr Ser Leu Asn Met Cys Leu Gln Cys Cys His Gln Tyr Val Lys
 35 40 45
 Asp Ile Gly Phe Ile Lys Leu Asp *
 50 55 56

<210> 1747
 <211> 90
 <212> PRT
 <213> Homo sapiens

<400> 1747
 Met Gly Leu Gln Arg Phe Arg Glu Ala Ala Val Phe Gln Glu Thr
 1 5 10 15
 Leu Arg Gly Gly Ser Gln Pro Asp Ala Ala Arg Glu Leu Arg Ser Cys
 20 25 30
 Leu Leu His Leu Thr Leu Gln Gly Gln Arg Gly Gly Ile Cys Ala Pro
 35 40 45

Pro	Leu	Ser	Pro	Gly	Ala	Leu	Gln	Pro	Leu	Pro	His	Ala	Glu	Leu	Ala
50						55					60				
Pro	Ser	Gly	Leu	Pro	Ser	Leu	Arg	Cys	Pro	Arg	Ser	Thr	Ala	Leu	Arg
65					70					75					80
Ser	Pro	Gly	Leu	Ser	Pro	Leu	Leu	His	*						
				85				89							

<210> 1748
 <211> 218
 <212> PRT
 <213> Homo sapiens

<400> 1748

Met	Val	Lys	Leu	Gly	Cys	Ser	Phe	Ser	Gly	Lys	Pro	Gly	Lys	Asp	Pro
1				5					10					15	
Gly	Asp	Gln	Asp	Gly	Ala	Ala	Met	Asp	Ser	Val	Pro	Leu	Ile	Ser	Pro
			20					25					30		
Leu	Asp	Ile	Ser	Gln	Leu	Gln	Pro	Pro	Leu	Pro	Asp	Gln	Val	Val	Ile
		35					40					45			
Lys	Thr	Gln	Thr	Glu	Tyr	Gln	Leu	Ser	Ser	Pro	Asp	Gln	Gln	Asn	Phe
	50					55					60				
Pro	Asp	Leu	Glu	Gly	Gln	Arg	Leu	Asn	Cys	Ser	His	Pro	Glu	Glu	Gly
65					70					75					80
Arg	Arg	Leu	Pro	Thr	Ala	Arg	Met	Ile	Ala	Phe	Ala	Met	Ala	Leu	Leu
				85					90					95	
Gly	Cys	Val	Leu	Ile	Met	Tyr	Lys	Ala	Ile	Trp	Tyr	Asp	Gln	Phe	Thr
			100					105					110		
Cys	Pro	Asp	Gly	Phe	Leu	Leu	Arg	His	Lys	Ile	Cys	Thr	Pro	Leu	Thr
		115					120					125			
Leu	Glu	Met	Tyr	Tyr	Thr	Glu	Met	Asp	Pro	Glu	Arg	His	Arg	Ser	Ile
	130					135					140				
Leu	Ala	Ala	Ile	Gly	Ala	Tyr	Pro	Leu	Ser	Arg	Lys	His	Gly	Thr	Glu
145					150					155					160
Thr	Pro	Ala	Ala	Trp	Gly	Asp	Gly	Tyr	Arg	Ala	Ala	Lys	Glu	Glu	Arg
				165				170						175	
Lys	Gly	Pro	Thr	Gln	Ala	Gly	Ala	Ala	Ala	Ala	Ala	Thr	Glu	Pro	Pro
			180				185						190		
Gly	Lys	Pro	Ser	Ala	Lys	Ala	Glu	Lys	Glu	Ala	Ala	Arg	Lys	Ala	Ala
		195					200					205			
Gly	Ser	Ala	Ala	Pro	Pro	Pro	Ala	Gln	*						
210						215		217							

<210> 1749
 <211> 405
 <212> PRT
 <213> Homo sapiens

<400> 1749

Met	Ala	Glu	Ser	Val	Glu	Arg	Leu	Gln	Gln	Arg	Val	Gln	Glu	Leu	Glu
1				5					10					15	
Arg	Glu	Leu	Ala	Gln	Glu	Arg	Ser	Leu	Gln	Val	Pro	Arg	Ser	Gly	Asp
			20					25					30		
Gly	Gly	Gly	Gly	Arg	Val	Arg	Ile	Glu	Lys	Met	Ser	Ser	Glu	Val	Val
		35					40					45			
Asp	Ser	Asn	Pro	Tyr	Ser	Arg	Leu	Met	Ala	Leu	Lys	Arg	Met	Gly	Ile
	50					55					60				
Val	Ser	Asp	Tyr	Glu	Lys	Ile	Arg	Thr	Phe	Ala	Val	Ala	Ile	Val	Gly
65					70					75					80

Val	Gly	Gly	Val	Gly	Ser	Val	Thr	Ala	Glu	Met	Leu	Thr	Arg	Cys	Gly
				85					90					95	
Ile	Gly	Lys	Leu	Leu	Leu	Phe	Asp	Tyr	Asp	Lys	Val	Glu	Leu	Ala	Asn
			100					105					110		
Met	Asn	Arg	Leu	Phe	Phe	Gln	Pro	His	Gln	Ala	Gly	Leu	Ser	Lys	Val
		115					120					125			
Gln	Ala	Ala	Glu	His	Thr	Leu	Arg	Asn	Ile	Asn	Pro	Asp	Val	Leu	Phe
	130					135					140				
Glu	Val	His	Asn	Tyr	Asn	Ile	Thr	Thr	Val	Glu	Asn	Phe	Gln	His	Phe
145					150					155					160
Met	Asp	Arg	Ile	Ser	Asn	Gly	Gly	Leu	Glu	Glu	Gly	Lys	Pro	Val	Asp
			165						170					175	
Leu	Val	Leu	Ser	Cys	Val	Asp	Asn	Phe	Glu	Ala	Arg	Met	Thr	Ile	Asn
		180						185					190		
Thr	Ala	Cys	Asn	Glu	Leu	Gly	Gln	Thr	Trp	Met	Glu	Ser	Gly	Val	Ser
	195						200					205			
Glu	Asn	Ala	Val	Ser	Gly	His	Ile	Gln	Leu	Ile	Ile	Pro	Gly	Glu	Ser
	210					215					220				
Ala	Cys	Phe	Ala	Cys	Ala	Pro	Pro	Leu	Val	Val	Ala	Ala	Asn	Ile	Asp
225					230					235					240
Glu	Lys	Thr	Leu	Lys	Arg	Glu	Gly	Val	Cys	Ala	Ala	Ser	Leu	Pro	Thr
			245						250					255	
Thr	Met	Gly	Val	Val	Ala	Gly	Ile	Leu	Val	Gln	Asn	Val	Leu	Lys	Phe
		260						265					270		
Leu	Leu	Asn	Phe	Gly	Thr	Val	Ser	Phe	Tyr	Leu	Gly	Tyr	Asn	Ala	Met
	275						280					285			
Gln	Asp	Phe	Phe	Pro	Thr	Met	Ser	Met	Lys	Pro	Asn	Pro	Gln	Cys	Asp
	290					295					300				
Asp	Arg	Asn	Cys	Arg	Lys	Gln	Gln	Glu	Glu	Tyr	Lys	Lys	Lys	Val	Ala
305					310					315					320
Ala	Leu	Pro	Lys	Gln	Glu	Val	Ile	Gln	Glu	Glu	Glu	Glu	Ile	Ile	His
			325						330					335	
Glu	Asp	Asn	Glu	Trp	Gly	Ile	Glu	Leu	Val	Ser	Glu	Val	Ser	Glu	Glu
	340						345					350			
Glu	Leu	Lys	Asn	Phe	Ser	Gly	Pro	Val	Pro	Asp	Leu	Pro	Glu	Gly	Ile
	355						360					365			
Thr	Val	Ala	Tyr	Thr	Ile	Pro	Lys	Lys	Gln	Glu	Asp	Ser	Val	Thr	Glu
	370					375					380				
Leu	Thr	Val	Glu	Asp	Ser	Gly	Glu	Ser	Leu	Glu	Asp	Leu	Met	Ala	Lys
385					390					395					400
Met	Lys	Asn	Met	*											
			404												

<210> 1750

<211> 199

<212> PRT

<213> Homo sapiens

<400> 1750

Met	Ala	Asp	Gln	Arg	Gln	Arg	Ser	Leu	Ser	Thr	Ser	Gly	Glu	Ser	Leu
1				5					10					15	
Tyr	His	Val	Leu	Gly	Leu	Asp	Lys	Asn	Ala	Thr	Ser	Asp	Asp	Ile	Lys
		20						25					30		
Lys	Ser	Tyr	Arg	Lys	Leu	Ala	Leu	Lys	Tyr	His	Pro	Asp	Lys	Asn	Pro
		35					40					45			
Asp	Asn	Pro	Glu	Ala	Ala	Asp	Lys	Phe	Lys	Glu	Ile	Asn	Asn	Ala	His
	50					55					60				
Ala	Ile	Leu	Thr	Asp	Ala	Thr	Lys	Arg	Asn	Ile	Tyr	Asp	Lys	Tyr	Gly
65					70					75					80
Ser	Leu	Gly	Leu	Tyr	Val	Ala	Glu	Gln	Phe	Gly	Glu	Glu	Asn	Val	Asn
				85					90					95	

Thr	Tyr	Phe	Val	Leu	Ser	Ser	Trp	Trp	Ala	Lys	Ala	Leu	Phe	Val	Phe
			100					105					110		
Cys	Gly	Leu	Leu	Thr	Cys	Cys	Tyr	Cys	Cys	Cys	Cys	Leu	Cys	Cys	Cys
		115					120					125			
Phe	Asn	Cys	Cys	Cys	Gly	Lys	Cys	Lys	Pro	Lys	Ala	Pro	Glu	Gly	Glu
	130					135					140				
Glu	Thr	Glu	Phe	Tyr	Val	Ser	Pro	Glu	Asp	Leu	Glu	Ala	Gln	Leu	Gln
145					150					155					160
Ser	Asp	Glu	Arg	Glu	Ala	Thr	Asp	Thr	Pro	Ile	Val	Ile	Gln	Pro	Ala
				165					170					175	
Ser	Ala	Thr	Glu	Thr	Thr	Gln	Leu	Thr	Ala	Asp	Ser	His	Pro	Ser	Tyr
			180					185					190		
His	Thr	Asp	Gly	Phe	Asn	*									
		195			198										

<210> 1751

<211> 953

<212> PRT

<213> Homo sapiens

<400> 1751

Met	Gly	Ser	Arg	Ala	Asp	Gly	Pro	Arg	Thr	Ser	Gly	His	Val	Thr	Gly
1				5					10					15	
Lys	Met	Ala	Val	Phe	Pro	Trp	His	Ser	Arg	Asn	Arg	Asn	Tyr	Lys	Ala
			20					25					30		
Glu	Phe	Ala	Ser	Cys	Arg	Leu	Glu	Ala	Val	Pro	Leu	Glu	Phe	Gly	Asp
		35					40					45			
Tyr	His	Pro	Leu	Lys	Pro	Ile	Thr	Val	Thr	Glu	Ser	Lys	Thr	Lys	Lys
	50					55					60				
Val	Asn	Arg	Lys	Gly	Ser	Thr	Ser	Ser	Thr	Ser	Ser	Ser	Ser	Ser	Ser
65					70					75					80
Ser	Val	Val	Asp	Pro	Leu	Ser	Ser	Val	Leu	Asp	Gly	Thr	Asp	Pro	Leu
				85					90					95	
Ser	Met	Phe	Ala	Ala	Thr	Ala	Asp	Pro	Ala	Ala	Leu	Ala	Ala	Ala	Met
			100					105						110	
Asp	Ser	Ser	Arg	Arg	Lys	Arg	Asp	Arg	Asp	Asp	Asn	Ser	Val	Val	Gly
		115					120					125			
Ser	Asp	Phe	Glu	Pro	Trp	Thr	Asn	Lys	Arg	Gly	Glu	Ile	Leu	Ala	Arg
	130					135					140				
Tyr	Thr	Thr	Thr	Glu	Lys	Leu	Ser	Ile	Asn	Leu	Phe	Met	Gly	Ser	Glu
145					150					155					160
Lys	Gly	Lys	Ala	Gly	Thr	Ala	Thr	Leu	Ala	Met	Ser	Glu	Lys	Val	Arg
				165					170					175	
Thr	Arg	Leu	Glu	Glu	Leu	Asp	Asp	Phe	Glu	Glu	Gly	Ser	Gln	Lys	Glu
			180					185					190		
Leu	Leu	Asn	Leu	Thr	Gln	Gln	Asp	Tyr	Val	Asn	Arg	Ile	Glu	Glu	Leu
		195					200					205			
Asn	Gln	Ser	Leu	Lys	Asp	Ala	Trp	Ala	Ser	Asp	Gln	Lys	Val	Lys	Ala
	210					215					220				
Leu	Lys	Ile	Val	His	Pro	Gly	Lys	Leu	Val	Tyr	Glu	Arg	Ile	Phe	Ser
225					230					235					240
Met	Cys	Val	Asp	Ser	Arg	Ser	Val	Leu	Pro	Asp	His	Phe	Ser	Pro	Glu
				245					250					255	
Asn	Ala	Asn	Asp	Thr	Ala	Lys	Glu	Thr	Cys	Leu	Asn	Trp	Phe	Phe	Lys
			260					265					270		
Ile	Ala	Ser	Ile	Arg	Glu	Leu	Ile	Pro	Arg	Phe	Tyr	Val	Glu	Ala	Ser
		275					280					285			
Ile	Leu	Lys	Cys	Asn	Lys	Phe	Leu	Ser	Lys	Thr	Gly	Ile	Ser	Glu	Cys
	290					295					300				
Leu	Pro	Arg	Leu	Thr	Cys	Met	Ile	Arg	Gly	Ile	Gly	Asp	Pro	Leu	Val
305					310					315					320

Ser	Val	Tyr	Ala	Arg	Ala	Tyr	Leu	Cys	Arg	Val	Gly	Met	Glu	Val	Ala		
				325					330						335		
Pro	His	Leu	Lys	Glu	Thr	Leu	Asn	Lys	Asn	Phe	Phe	Asp	Phe	Leu	Leu		
			340					345					350				
Thr	Phe	Lys	Gln	Ile	His	Gly	Asp	Thr	Val	Gln	Asn	Gln	Leu	Val	Val		
		355					360					365					
Gln	Gly	Val	Glu	Leu	Pro	Ser	Tyr	Leu	Pro	Leu	Tyr	Pro	Pro	Ala	Met		
	370					375					380						
Asp	Trp	Ile	Phe	Gln	Cys	Ile	Ser	Tyr	His	Ala	Pro	Glu	Ala	Leu	Leu		
385					390				395						400		
Thr	Glu	Met	Met	Glu	Arg	Cys	Lys	Lys	Leu	Gly	Asn	Asn	Ala	Leu	Leu		
				405					410					415			
Leu	Asn	Ser	Val	Met	Ser	Ala	Phe	Arg	Ala	Glu	Phe	Ile	Ala	Thr	Arg		
			420					425					430				
Ser	Met	Asp	Phe	Ile	Gly	Met	Ile	Lys	Glu	Cys	Asp	Glu	Ser	Gly	Phe		
		435				440					445						
Pro	Lys	His	Leu	Leu	Phe	Arg	Ser	Leu	Gly	Leu	Asn	Leu	Ala	Leu	Ala		
	450					455					460						
Asp	Pro	Pro	Glu	Ser	Asp	Arg	Leu	Gln	Ile	Leu	Asn	Glu	Ala	Trp	Lys		
465					470					475					480		
Val	Ile	Thr	Lys	Leu	Lys	Asn	Pro	Gln	Asp	Tyr	Ile	Asn	Cys	Ala	Glu		
			485					490						495			
Val	Trp	Val	Glu	Tyr	Thr	Cys	Lys	His	Phe	Thr	Lys	Arg	Glu	Val	Asn		
		500						505					510				
Thr	Val	Leu	Ala	Asp	Val	Ile	Lys	His	Met	Thr	Pro	Asp	Arg	Ala	Phe		
		515					520					525					
Glu	Asp	Ser	Tyr	Pro	Gln	Leu	Gln	Leu	Ile	Ile	Lys	Lys	Val	Ile	Ala		
	530					535					540						
His	Phe	His	Asp	Phe	Ser	Val	Leu	Phe	Ser	Val	Glu	Lys	Phe	Leu	Pro		
545					550					555					560		
Phe	Leu	Asp	Met	Phe	Gln	Lys	Glu	Ser	Val	Arg	Val	Glu	Val	Cys	Lys		
			565						570					575			
Cys	Ile	Met	Asp	Ala	Phe	Ile	Lys	His	Gln	Gln	Glu	Pro	Thr	Lys	Asp		
		580						585					590				
Pro	Val	Ile	Leu	Asn	Ala	Leu	Leu	His	Val	Cys	Lys	Thr	Met	His	Asp		
		595				600						605					
Ser	Val	Asn	Ala	Leu	Thr	Leu	Glu	Asp	Glu	Lys	Arg	Met	Leu	Ser	Tyr		
	610					615					620						
Leu	Ile	Asn	Gly	Phe	Ile	Lys	Met	Val	Ser	Phe	Gly	Arg	Asp	Phe	Glu		
625					630					635					640		
Gln	Gln	Leu	Ser	Phe	Tyr	Val	Glu	Ser	Arg	Ser	Met	Phe	Cys	Asn	Leu		
			645						650					655			
Glu	Pro	Val	Leu	Val	Gln	Leu	Ile	His	Ser	Val	Asn	Arg	Leu	Ala	Met		
		660						665					670				
Glu	Thr	Arg	Lys	Val	Met	Lys	Gly	Asn	His	Ser	Arg	Lys	Thr	Ala	Ala		
		675					680					685					
Phe	Val	Arg	Ala	Cys	Val	Ala	Tyr	Cys	Phe	Ile	Thr	Ile	Pro	Ser	Leu		
	690					695					700						
Ala	Gly	Ile	Phe	Thr	Arg	Leu	Asn	Leu	Tyr	Leu	His	Ser	Gly	Gln	Val		
705					710					715					720		
Ala	Leu	Ala	Asn	Gln	Cys	Leu	Ser	Gln	Ala	Asp	Ala	Phe	Phe	Lys	Ala		
			725						730					735			
Ala	Ile	Ser	Leu	Val	Pro	Glu	Val	Pro	Lys	Met	Ile	Asn	Ile	Asp	Gly		
		740						745					750				
Lys	Met	Arg	Pro	Ser	Glu	Ser	Phe	Leu	Leu	Glu	Phe	Leu	Cys	Asn	Phe		
		755					760					765					
Phe	Ser	Thr	Leu	Leu	Ile	Val	Pro	Asp	His	Pro	Glu	His	Gly	Val	Leu		
	770					775					780						
Phe	Leu	Val	Arg	Glu	Leu	Leu	Asn	Val	Ile	Gln	Asp	Tyr	Thr	Trp	Glu		
785					790					795					800		
Asp	Asn	Ser	Asp	Glu	Lys	Ile	Arg	Ile	Tyr	Thr	Cys	Val	Leu	His	Leu		
			805						810					815			
Leu	Ser	Ala	Met	Ser	Gln	Glu	Thr	Tyr	Leu	Tyr	His	Ile	Asp	Lys	Val		
			820					825					830				

Asp	Ser	Asn	Asp	Ser	Leu	Tyr	Gly	Gly	Asp	Ser	Lys	Phe	Leu	Ala	Glu
		835					840					845			
Asn	Asn	Lys	Leu	Cys	Glu	Thr	Val	Met	Ala	Gln	Ile	Leu	Glu	His	Leu
	850					855					860				
Lys	Thr	Leu	Ala	Lys	Asp	Glu	Ala	Leu	Lys	Arg	Gln	Ser	Ser	Leu	Gly
865					870					875					880
Leu	Ser	Phe	Phe	Asn	Ser	Ile	Leu	Ala	His	Gly	Asp	Leu	Arg	Asn	Asn
				885					890					895	
Lys	Leu	Asn	Gln	Leu	Ser	Val	Asn	Leu	Trp	His	Leu	Ala	Gln	Arg	His
			900					905					910		
Gly	Cys	Ala	Asp	Thr	Arg	Thr	Met	Val	Lys	Thr	Leu	Glu	Tyr	Ile	Lys
		915					920					925			
Lys	Gln	Ser	Lys	Gln	Pro	Asp	Met	Thr	His	Leu	Thr	Glu	Leu	Ala	Leu
	930					935						940			
Arg	Leu	Pro	Leu	Gln	Thr	Arg	Thr	*							
945					950		952								

<210> 1752

<211> 510

<212> PRT

<213> Homo sapiens

<400> 1752

Met	Ala	Glu	Arg	Ala	Ala	Leu	Glu	Glu	Leu	Val	Lys	Leu	Gln	Gly	Glu
1				5					10					15	
Arg	Val	Arg	Gly	Leu	Lys	Gln	Gln	Lys	Ala	Ser	Ala	Glu	Leu	Ile	Glu
			20					25					30		
Glu	Glu	Val	Ala	Lys	Leu	Leu	Lys	Leu	Lys	Ala	Gln	Leu	Gly	Pro	Asp
		35					40					45			
Glu	Ser	Lys	Gln	Lys	Phe	Val	Leu	Lys	Thr	Pro	Lys	Gly	Thr	Arg	Asp
	50				55					60					
Tyr	Ser	Pro	Arg	Gln	Met	Ala	Val	Arg	Glu	Lys	Val	Phe	Asp	Val	Ile
65				70					75					80	
Ile	Arg	Cys	Phe	Lys	Arg	His	Gly	Ala	Glu	Val	Ile	Asp	Thr	Pro	Val
			85					90						95	
Phe	Glu	Leu	Lys	Glu	Thr	Leu	Met	Gly	Lys	Tyr	Gly	Glu	Asp	Ser	Lys
		100					105					110			
Leu	Ile	Tyr	Asp	Leu	Lys	Asp	Gln	Gly	Gly	Glu	Leu	Leu	Ser	Leu	Arg
	115					120					125				
Tyr	Asp	Leu	Thr	Val	Pro	Phe	Ala	Arg	Tyr	Leu	Ala	Met	Asn	Lys	Leu
130					135					140					
Thr	Asn	Ile	Lys	Arg	Tyr	His	Ile	Ala	Lys	Val	Tyr	Arg	Arg	Asp	Asn
145				150						155				160	
Pro	Ala	Met	Thr	Arg	Gly	Arg	Tyr	Arg	Glu	Phe	Tyr	Gln	Cys	Asp	Phe
			165					170						175	
Asp	Ile	Ala	Gly	Asn	Phe	Asp	Pro	Met	Ile	Pro	Asp	Ala	Glu	Cys	Leu
		180					185					190			
Lys	Ile	Met	Cys	Glu	Ile	Leu	Ser	Ser	Leu	Gln	Ile	Gly	Asp	Phe	Leu
	195					200						205			
Val	Lys	Val	Asn	Asp	Arg	Arg	Ile	Leu	Asp	Gly	Met	Phe	Ala	Ile	Cys
210					215						220				
Gly	Val	Ser	Asp	Ser	Lys	Phe	Arg	Thr	Ile	Cys	Ser	Ser	Val	Asp	Lys
225					230					235				240	
Leu	Asp	Lys	Val	Ser	Trp	Glu	Glu	Val	Lys	Asn	Glu	Met	Val	Gly	Glu
			245						250					255	
Lys	Gly	Leu	Ala	Pro	Glu	Val	Ala	Asp	Arg	Ile	Gly	Asp	Tyr	Val	Gln
		260					265					270			
Gln	His	Gly	Gly	Val	Ser	Leu	Val	Glu	Gln	Leu	Leu	Gln	Asp	Pro	Lys
	275					280						285			
Leu	Ser	Gln	Asn	Lys	Gln	Ala	Leu	Glu	Gly	Leu	Gly	Asp	Leu	Lys	Leu
290					295							300			

Leu	Phe	Glu	Tyr	Leu	Thr	Leu	Phe	Gly	Ile	Asp	Asp	Lys	Ile	Ser	Phe
305					310					315					320
Asp	Leu	Ser	Leu	Ala	Arg	Gly	Leu	Asp	Tyr	Tyr	Thr	Gly	Val	Ile	Tyr
				325					330					335	
Glu	Ala	Val	Leu	Leu	Gln	Thr	Pro	Ala	Gln	Ala	Gly	Glu	Glu	Pro	Leu
				340					345					350	
Gly	Val	Gly	Ser	Val	Ala	Ala	Gly	Gly	Arg	Tyr	Asp	Gly	Leu	Val	Gly
		355					360					365			
Met	Phe	Asp	Pro	Lys	Gly	Arg	Lys	Val	Pro	Cys	Val	Gly	Leu	Ser	Ile
	370					375					380				
Gly	Val	Glu	Arg	Ile	Phe	Ser	Ile	Val	Glu	Gln	Arg	Leu	Glu	Ala	Leu
385					390					395					400
Glu	Glu	Lys	Ile	Arg	Thr	Thr	Glu	Thr	Gln	Val	Leu	Val	Ala	Ser	Ala
				405					410						415
Gln	Lys	Lys	Leu	Leu	Glu	Glu	Arg	Leu	Lys	Leu	Val	Ser	Glu	Leu	Trp
			420					425					430		
Asp	Ala	Gly	Ile	Lys	Ala	Glu	Leu	Leu	Tyr	Lys	Lys	Asn	Pro	Lys	Leu
		435					440					445			
Leu	Asn	Gln	Leu	Gln	Tyr	Cys	Glu	Glu	Ala	Gly	Ile	Pro	Leu	Val	Ala
	450					455					460				
Ile	Ile	Gly	Glu	Gln	Glu	Leu	Lys	Asp	Gly	Val	Ile	Lys	Leu	Arg	Ser
465					470					475					480
Val	Thr	Ser	Arg	Glu	Glu	Val	Asp	Val	Arg	Arg	Glu	Asp	Leu	Val	Glu
				485					490						495
Glu	Ile	Lys	Arg	Arg	Thr	Gly	Gln	Pro	Leu	Cys	Ile	Cys	*		
			500					505				509			

<210> 1753

<211> 4545

<212> PRT

<213> Homo sapiens

<400> 1753

Met	Leu	Thr	Pro	Pro	Leu	Leu	Leu	Leu	Leu	Pro	Leu	Leu	Ser	Ala	Leu
1				5					10					15	
Val	Ala	Ala	Ala	Ile	Asp	Ala	Pro	Lys	Thr	Cys	Ser	Pro	Lys	Gln	Phe
			20					25					30		
Ala	Cys	Arg	Asp	Gln	Ile	Thr	Cys	Ile	Ser	Lys	Gly	Trp	Arg	Cys	Asp
		35					40					45			
Gly	Glu	Arg	Asp	Cys	Pro	Asp	Gly	Ser	Asp	Glu	Ala	Pro	Glu	Ile	Cys
	50					55					60				
Pro	Gln	Ser	Lys	Ala	Gln	Arg	Cys	Gln	Pro	Asn	Glu	His	Asn	Cys	Leu
65					70					75				80	
Gly	Thr	Glu	Leu	Cys	Val	Pro	Met	Ser	Arg	Leu	Cys	Asn	Gly	Val	Gln
				85					90					95	
Asp	Cys	Met	Asp	Gly	Ser	Asp	Glu	Gly	Pro	His	Cys	Arg	Glu	Leu	Gln
			100					105					110		
Gly	Asn	Cys	Ser	Arg	Leu	Gly	Cys	Gln	His	His	Cys	Val	Pro	Thr	Leu
	115						120					125			
Asp	Gly	Pro	Thr	Cys	Tyr	Cys	Asn	Ser	Ser	Phe	Gln	Leu	Gln	Ala	Asp
	130					135					140				
Gly	Lys	Thr	Cys	Lys	Asp	Phe	Asp	Glu	Cys	Ser	Val	Tyr	Gly	Thr	Cys
145					150					155					160
Ser	Gln	Leu	Cys	Thr	Asn	Thr	Asp	Gly	Ser	Phe	Ile	Cys	Gly	Cys	Val
				165					170					175	
Glu	Gly	Tyr	Leu	Leu	Gln	Pro	Asp	Asn	Arg	Ser	Cys	Lys	Ala	Lys	Asn
			180					185					190		
Glu	Pro	Val	Asp	Arg	Pro	Pro	Val	Leu	Leu	Ile	Ala	Asn	Ser	Gln	Asn
		195					200					205			
Ile	Leu	Ala	Thr	Tyr	Leu	Ser	Gly	Ala	Gln	Val	Ser	Thr	Ile	Thr	Pro
210						215									220

Thr	Ser	Thr	Arg	Gln	Thr	Thr	Ala	Met	Asp	Phe	Ser	Tyr	Ala	Asn	Glu
225					230					235					240
Thr	Val	Cys	Trp	Val	His	Val	Gly	Asp	Ser	Ala	Ala	Gln	Thr	Gln	Leu
				245					250					255	
Lys	Cys	Ala	Arg	Met	Pro	Gly	Leu	Lys	Gly	Phe	Val	Asp	Glu	His	Thr
			260					265					270		
Ile	Asn	Ile	Ser	Leu	Ser	Leu	His	His	Val	Glu	Gln	Met	Ala	Ile	Asp
		275					280					285			
Trp	Leu	Thr	Gly	Asn	Phe	Tyr	Phe	Val	Asp	Asp	Ile	Asp	Asp	Arg	Ile
	290					295					300				
Phe	Val	Cys	Asn	Arg	Asn	Gly	Asp	Thr	Cys	Val	Thr	Leu	Leu	Asp	Leu
305					310					315					320
Glu	Leu	Tyr	Asn	Pro	Lys	Gly	Ile	Ala	Leu	Asp	Pro	Ala	Met	Gly	Lys
				325					330					335	
Val	Phe	Phe	Thr	Asp	Tyr	Gly	Gln	Ile	Pro	Lys	Val	Glu	Arg	Cys	Asp
			340					345					350		
Met	Asp	Gly	Gln	Asn	Arg	Thr	Lys	Leu	Val	Asp	Ser	Lys	Ile	Val	Phe
		355					360					365			
Pro	His	Gly	Ile	Thr	Leu	Asp	Leu	Val	Ser	Arg	Leu	Val	Tyr	Trp	Ala
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Asp	Ala	Tyr	Leu	Asp	Tyr	Ile	Glu	Val	Val	Asp	Tyr	Glu	Gly	Lys	Gly
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Arg	Gln	Thr	Ile	Ile	Gln	Gly	Ile	Leu	Ile	Glu	His	Leu	Tyr	Gly	Leu
				405						410				415	
Thr	Val	Phe	Glu	Asn	Tyr	Leu	Tyr	Ala	Thr	Asn	Ser	Asp	Asn	Ala	Asn
			420					425					430		
Ala	Gln	Gln	Lys	Thr	Ser	Val	Ile	Arg	Val	Asn	Arg	Phe	Asn	Ser	Thr
		435					440					445			
Glu	Tyr	Gln	Val	Val	Thr	Arg	Val	Asp	Lys	Gly	Gly	Ala	Leu	His	Ile
	450					455					460				
Tyr	His	Gln	Arg	Arg	Gln	Pro	Arg	Val	Arg	Ser	His	Ala	Cys	Glu	Asn
465					470					475					480
Asp	Gln	Tyr	Gly	Lys	Pro	Gly	Gly	Cys	Ser	Asp	Ile	Cys	Leu	Leu	Ala
				485					490				495		
Asn	Ser	His	Lys	Ala	Arg	Thr	Cys	Arg	Cys	Arg	Ser	Gly	Phe	Ser	Leu
			500				505						510		
Gly	Ser	Asp	Gly	Lys	Ser	Cys	Lys	Lys	Pro	Glu	His	Glu	Leu	Phe	Leu
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Val	Tyr	Gly	Lys	Gly	Arg	Pro	Gly	Ile	Ile	Arg	Gly	Met	Asp	Met	Gly
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Ala	Lys	Val	Pro	Asp	Glu	His	Met	Ile	Pro	Ile	Glu	Asn	Leu	Met	Asn
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Pro	Arg	Ala	Leu	Asp	Phe	His	Ala	Glu	Thr	Gly	Phe	Ile	Tyr	Phe	Ala
				565					570					575	
Asp	Thr	Thr	Ser	Tyr	Leu	Ile	Gly	Arg	Gln	Lys	Ile	Asp	Gly	Thr	Glu
			580					585					590		
Arg	Glu	Thr	Ile	Leu	Lys	Asp	Gly	Ile	His	Asn	Val	Glu	Gly	Val	Ala
	595						600					605			
Val	Asp	Trp	Met	Gly	Asp	Asn	Leu	Tyr	Trp	Thr	Asp	Asp	Gly	Pro	Lys
	610					615					620				
Lys	Thr	Ile	Ser	Val	Ala	Arg	Leu	Glu	Lys	Ala	Ala	Gln	Thr	Arg	Lys
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Thr	Leu	Ile	Glu	Gly	Lys	Met	Thr	His	Pro	Arg	Ala	Ile	Val	Val	Asp
				645					650					655	
Pro	Leu	Asn	Gly	Trp	Met	Tyr	Trp	Thr	Asp	Trp	Glu	Glu	Asp	Pro	Lys
			660					665					670		
Asp	Ser	Arg	Arg	Gly	Arg	Leu	Glu	Arg	Ala	Trp	Met	Asp	Gly	Ser	His
		675					680					685			
Arg	Asp	Ile	Phe	Val	Thr	Ser	Lys	Thr	Val	Leu	Trp	Pro	Asn	Gly	Leu
	690					695					700				
Ser	Leu	Asp	Ile	Pro	Ala	Gly	Arg	Leu	Tyr	Trp	Val	Asp	Ala	Phe	Tyr
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Asp	Arg	Ile	Glu	Thr	Ile	Leu	Leu	Asn	Gly	Thr	Asp	Arg	Lys	Ile	Val
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3604

Tyr Glu Gly Trp Val Leu Glu Pro Asp Gly Glu Ser Cys Arg Ser Leu
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Asp Pro Phe Lys Pro Phe Ile Ile Phe Ser Asn Arg His Glu Ile Arg
1265 1270 1275 1280
Arg Ile Asp Leu His Lys Gly Asp Tyr Ser Val Leu Val Pro Gly Leu
1285 1290 1295
Arg Asn Thr Ile Ala Leu Asp Phe His Leu Ser Gln Ser Ala Leu Tyr
1300 1305 1310
Trp Thr Asp Val Val Glu Asp Lys Ile Tyr Arg Gly Lys Leu Leu Asp
1315 1320 1325
Asn Gly Ala Leu Thr Ser Phe Glu Val Val Ile Gln Tyr Gly Leu Ala
1330 1335 1340
Thr Pro Glu Gly Leu Ala Val Asp Trp Ile Ala Gly Asn Ile Tyr Trp
1345 1350 1355 1360
Val Glu Ser Asn Leu Asp Gln Ile Glu Val Ala Lys Leu Asp Gly Thr
1365 1370 1375
Leu Arg Thr Thr Leu Leu Ala Gly Asp Ile Glu His Pro Arg Ala Ile
1380 1385 1390
Ala Leu Asp Pro Arg Asp Gly Ile Leu Phe Trp Thr Asp Trp Asp Ala
1395 1400 1405
Ser Leu Pro Arg Ile Glu Ala Ala Ser Met Ser Gly Ala Gly Arg Arg
1410 1415 1420
Thr Val His Arg Glu Thr Gly Ser Gly Gly Trp Pro Asn Gly Leu Thr
1425 1430 1435 1440
Val Asp Tyr Leu Glu Lys Arg Ile Leu Trp Ile Asp Ala Arg Ser Asp
1445 1450 1455
Ala Ile Tyr Ser Ala Arg Tyr Asp Gly Ser Gly His Met Glu Val Leu
1460 1465 1470
Arg Gly His Glu Phe Leu Ser His Pro Phe Ala Val Thr Leu Tyr Gly
1475 1480 1485
Gly Glu Val Tyr Trp Thr Asp Trp Arg Thr Asn Thr Leu Ala Lys Ala
1490 1495 1500
Asn Lys Trp Thr Gly His Asn Val Thr Val Val Gln Arg Thr Asn Thr
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Gln Pro Phe Asp Leu Gln Val Tyr His Pro Ser Arg Gln Pro Met Ala
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Pro Asn Pro Cys Glu Ala Asn Gly Gly Gln Gly Pro Cys Ser His Leu
1540 1545 1550
Cys Leu Ile Asn Tyr Asn Arg Thr Val Ser Cys Ala Cys Pro His Leu
1555 1560 1565
Met Lys Leu His Lys Asp Asn Thr Thr Cys Tyr Glu Phe Lys Lys Phe
1570 1575 1580
Leu Leu Tyr Ala Arg Gln Met Glu Ile Arg Gly Val Asp Leu Asp Ala
1585 1590 1595 1600
Pro Tyr Tyr Asn Tyr Ile Ile Ser Phe Thr Val Pro Asp Ile Asp Asn
1605 1610 1615
Val Thr Val Leu Asp Tyr Asp Ala Arg Glu Gln Arg Val Tyr Trp Ser
1620 1625 1630
Asp Val Arg Thr Gln Ala Ile Lys Arg Ala Phe Ile Asn Gly Thr Gly
1635 1640 1645
Val Glu Thr Val Val Ser Ala Asp Leu Pro Asn Ala His Gly Leu Ala
1650 1655 1660
Val Asp Trp Val Ser Arg Asn Leu Phe Trp Thr Ser Tyr Asp Thr Asn
1665 1670 1675 1680
Lys Lys Gln Ile Asn Val Ala Arg Leu Asp Gly Ser Phe Lys Asn Ala
1685 1690 1695
Val Val Gln Gly Leu Glu Gln Pro His Gly Leu Val Val His Pro Leu
1700 1705 1710
Arg Gly Lys Leu Tyr Trp Thr Asp Gly Asp Asn Ile Ser Met Ala Asn
1715 1720 1725
Met Asp Gly Ser Asn Arg Thr Leu Leu Phe Ser Gly Gln Lys Gly Pro
1730 1735 1740
Val Gly Leu Ala Ile Asp Phe Pro Glu Ser Lys Leu Tyr Trp Ile Ser
1745 1750 1755 1760

Ser Gly Asn His Thr Ile Asn Arg Cys Asn Leu Asp Gly Ser Gly Leu
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 Glu Val Ile Asp Ala Met Arg Ser Gln Leu Gly Lys Ala Thr Ala Leu
 1780 1785 1790
 Ala Ile Met Gly Asp Lys Leu Trp Trp Ala Asp Gln Val Ser Glu Lys
 1795 1800 1805
 Met Gly Thr Cys Ser Lys Ala Asp Gly Ser Gly Ser Val Val Leu Arg
 1810 1815 1820
 Asn Ser Thr Thr Leu Val Met His Met Lys Val Tyr Asp Glu Ser Ile
 1825 1830 1835 1840
 Gln Leu Asp His Lys Gly Thr Asn Pro Cys Ser Val Asn Asn Gly Asp
 1845 1850 1855
 Cys Ser Gln Leu Cys Leu Pro Thr Ser Glu Thr Thr Arg Ser Cys Met
 1860 1865 1870
 Cys Thr Ala Gly Tyr Ser Leu Arg Ser Gly Gln Gln Ala Cys Glu Gly
 1875 1880 1885
 Val Gly Ser Phe Leu Leu Tyr Ser Val His Glu Gly Ile Arg Gly Ile
 1890 1895 1900
 Pro Leu Asp Pro Asn Asp Lys Ser Asp Ala Leu Val Pro Val Ser Gly
 1905 1910 1915 1920
 Thr Ser Leu Ala Val Gly Ile Asp Phe His Ala Glu Asn Asp Thr Ile
 1925 1930 1935
 Tyr Trp Val Asp Met Gly Leu Ser Thr Ile Ser Arg Ala Lys Arg Asp
 1940 1945 1950
 Gln Thr Trp Arg Glu Asp Val Val Thr Asn Gly Ile Gly Arg Val Glu
 1955 1960 1965
 Gly Ile Ala Val Asp Trp Ile Ala Gly Asn Ile Tyr Trp Thr Asp Gln
 1970 1975 1980
 Gly Phe Asp Val Ile Glu Val Ala Arg Leu Asn Gly Ser Phe Arg Tyr
 1985 1990 1995 2000
 Val Val Ile Ser Gln Gly Leu Asp Lys Pro Arg Ala Ile Thr Val His
 2005 2010 2015
 Pro Glu Lys Gly Tyr Leu Phe Trp Thr Glu Trp Gly Gln Tyr Pro Arg
 2020 2025 2030
 Ile Glu Arg Ser Arg Leu Asp Gly Thr Glu Arg Val Val Leu Val Asn
 2035 2040 2045
 Val Ser Ile Ser Trp Pro Asn Gly Ile Ser Val Asp Tyr Gln Asp Gly
 2050 2055 2060
 Lys Leu Tyr Trp Cys Asp Ala Arg Thr Asp Lys Ile Glu Arg Ile Asp
 2065 2070 2075 2080
 Leu Glu Thr Gly Glu Asn Arg Glu Val Val Leu Ser Ser Asn Asn Met
 2085 2090 2095
 Asp Met Phe Ser Val Ser Val Phe Glu Asp Phe Ile Tyr Trp Ser Asp
 2100 2105 2110
 Arg Thr His Ala Asn Gly Ser Ile Lys Arg Gly Ser Lys Asp Asn Ala
 2115 2120 2125
 Thr Asp Ser Val Pro Leu Arg Thr Gly Ile Gly Val Gln Leu Lys Asp
 2130 2135 2140
 Ile Lys Val Phe Asn Arg Asp Arg Gln Lys Gly Thr Asn Val Cys Ala
 2145 2150 2155 2160
 Val Ala Asn Gly Gly Cys Gln Gln Leu Cys Leu Tyr Arg Gly Arg Gly
 2165 2170 2175
 Gln Arg Ala Cys Ala Cys Ala His Gly Met Leu Ala Glu Asp Gly Ala
 2180 2185 2190
 Ser Cys Arg Glu Tyr Ala Gly Tyr Leu Leu Tyr Ser Glu Arg Thr Ile
 2195 2200 2205
 Leu Lys Ser Ile His Leu Ser Asp Glu Arg Asn Leu Asn Ala Pro Val
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 Gln Pro Phe Glu Asp Pro Glu His Met Lys Asn Val Ile Ala Leu Ala
 2225 2230 2235 2240
 Phe Asp Tyr Arg Ala Gly Thr Ser Pro Gly Thr Pro Asn Arg Ile Phe
 2245 2250 2255
 Phe Ser Asp Ile His Phe Gly Asn Ile Gln Gln Ile Asn Asp Asp Gly
 2260 2265 2270

Ser Arg Arg Ile Thr Ile Val Glu Asn Val Gly Ser Val Glu Gly Leu
 2275 2280 2285
 Ala Tyr His Arg Gly Trp Asp Thr Leu Tyr Trp Thr Ser Tyr Thr Thr
 2290 2295 2300
 Ser Thr Ile Thr Arg His Thr Val Asp Gln Thr Arg Pro Gly Ala Phe
 2305 2310 2315 2320
 Glu Arg Glu Thr Val Ile Thr Met Ser Gly Asp Asp His Pro Arg Ala
 2325 2330 2335
 Phe Val Leu Asp Glu Cys Gln Asn Leu Met Phe Trp Thr Asn Trp Asn
 2340 2345 2350
 Glu Gln His Pro Ser Ile Met Arg Ala Ala Leu Ser Gly Ala Asn Val
 2355 2360 2365
 Leu Thr Leu Ile Glu Lys Asp Ile Arg Thr Pro Asn Gly Leu Ala Ile
 2370 2375 2380
 Asp His Arg Ala Glu Lys Leu Tyr Phe Ser Asp Ala Thr Leu Asp Lys
 2385 2390 2395 2400
 Ile Glu Arg Cys Glu Tyr Asp Gly Ser His Arg Tyr Val Ile Leu Lys
 2405 2410 2415
 Ser Glu Pro Val His Pro Phe Gly Leu Ala Val Tyr Gly Glu His Ile
 2420 2425 2430
 Phe Trp Thr Asp Trp Val Arg Arg Ala Val Gln Arg Ala Asn Lys His
 2435 2440 2445
 Val Gly Ser Asn Met Lys Leu Leu Arg Val Asp Ile Pro Gln Gln Pro
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 Met Gly Ile Ile Ala Val Ala Asn Asp Thr Asn Ser Cys Glu Leu Ser
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 2545 2550 2555 2560
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 Ala Gln Phe Glu Cys Gln Asn His Arg Cys Ile Ser Lys Gln Trp Leu
 2740 2745 2750
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 Cys Glu Gly Lys Thr Cys Gly Pro Ser Ser Phe Ser Cys Pro Gly Thr
 2770 2775 2780

His Val Cys Val Pro Glu Arg Trp Leu Cys Asp Gly Asp Lys Asp Cys
2785 2790 2795 2800
Ala Asp Gly Ala Asp Glu Ser Ile Ala Ala Gly Cys Leu Tyr Asn Ser
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Thr Cys Asp Asp Arg Glu Phe Met Cys Gln Asn Arg Gln Cys Ile Pro
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Lys His Phe Val Cys Asp His Asp Arg Asp Cys Ala Asp Gly Ser Asp
2835 2840 2845
Glu Ser Pro Glu Cys Glu Tyr Pro Thr Cys Gly Pro Ser Glu Phe Arg
2850 2855 2860
Cys Ala Asn Gly Arg Cys Leu Ser Ser Arg Gln Trp Glu Cys Asp Gly
2865 2870 2875 2880
Glu Asn Asp Cys His Asp Gln Ser Asp Glu Ala Pro Lys Asn Pro His
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Cys Thr Ser Pro Glu His Lys Cys Asn Ala Ser Ser Gln Phe Leu Cys
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Asp Cys Gly Asp Ser Ser Asp Glu Arg Gly Cys His Ile Asn Glu Cys
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Leu Ser Arg Lys Leu Ser Gly Cys Ser Gln Asp Cys Glu Asp Leu Lys
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Ile Gly Phe Lys Cys Arg Cys Arg Pro Gly Phe Arg Leu Lys Asp Asp
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Ser Gln Arg Cys Ile Asn Thr His Gly Ser Tyr Lys Cys Leu Cys Val
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Glu Gly Tyr Ala Pro Arg Gly Gly Asp Pro His Ser Cys Lys Ala Val
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His Ile Phe Ala Leu Thr Leu Phe Glu Asp Tyr Val Tyr Trp Thr Asp
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Trp Glu Thr Lys Ser Ile Asn Arg Ala His Lys Thr Thr Gly Thr Asn
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Cys Thr Gln Met Thr Cys Gly Val Asp Glu Phe Arg Cys Lys Asp Ser
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Glu Pro Tyr Gln Phe Arg Cys Lys Asn Asn Arg Cys Val Pro Gly Arg
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Trp Gln Cys Asp Tyr Asp Asn Asp Cys Gly Asp Asn Ser Asp Glu Glu
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Ala Asp Gly Ser Asp Glu Lys Asp Cys Thr Pro Arg Cys Asp Met Asp
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Thr Gly Val Arg Thr Cys Pro Leu Asp Glu Phe Gln Cys Asn Asn Thr
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Glu Asp Cys Glu Pro Pro Thr Ala His Thr Thr His Cys Lys Asp Lys
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Lys Glu Phe Leu Cys Arg Asn Gln Arg Cys Leu Ser Ser Ser Leu Arg
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Cys Asn Met Phe Asp Asp Cys Gly Asp Gly Ser Asp Glu Glu Asp Cys
3765 3770 3775
Ser Ile Asp Pro Lys Leu Thr Ser Cys Ala Thr Asn Ala Ser Ile Cys
3780 3785 3790
Gly Asp Glu Ala Arg Cys Val Arg Thr Glu Lys Ala Ala Tyr Cys Ala
3795 3800 3805

Cys Arg Ser Gly Phe His Thr Val Pro Gly Gln Pro Gly Cys Gln Asp
3810 3815 3820
Ile Asn Glu Cys Leu Arg Phe Gly Thr Cys Ser Gln Leu Cys Asn Asn
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Phe Lys Ile His Lys Phe Gly His Ser Pro Leu Val Asn Leu Thr Gly
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Gly Leu Ser His Ala Ser Asp Val Val Leu Tyr His Gln His Lys Gln
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Leu Leu Ser Pro Ser Gly Pro Val Cys Thr Cys Pro Asn Gly Lys Arg
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Leu Asp Asn Gly Thr Cys Val Pro Val Pro Ser Pro Thr Pro Pro Pro
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Asp Ala Pro Arg Pro Gly Thr Cys Asn Leu Gln Cys Phe Asn Gly Gly
4195 4200 4205
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4225 4230 4235 4240
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Arg Cys Pro Thr Gly Phe Thr Gly Pro Lys Cys Thr Gln Gln Val Cys
4260 4265 4270
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Gln Pro Gln Cys Arg Cys Leu Pro Gly Phe Leu Gly Asp Arg Cys Gln
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 Pro His Met Thr Gly Pro Arg Cys Glu Glu His Val Phe Ser Gln Gln
 4405 4410 4415
 Gln Pro Gly His Ile Ala Ser Ile Leu Ile Pro Leu Leu Leu Leu
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 Leu Leu Val Leu Val Ala Gly Val Val Phe Trp Tyr Lys Arg Arg Val
 4435 4440 4445
 Gln Gly Ala Lys Gly Phe Gln His Gln Arg Met Thr Asn Gly Ala Met
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 Asn Val Glu Ile Gly Asn Pro Thr Tyr Lys Met Tyr Glu Gly Gly Glu
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 Pro Asp Asp Val Gly Gly Leu Leu Asp Ala Asp Phe Ala Leu Asp Pro
 4485 4490 4495
 Asp Lys Pro Thr Asn Phe Thr Asn Pro Val Tyr Ala Thr Leu Tyr Met
 4500 4505 4510
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 <212> PRT
 <213> Homo sapiens

<400> 1754
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 Val His Pro Glu Pro Glu Ala Cys Gly Asp His Glu Gln Trp Thr Leu
 20 25 30
 Val Ala Asp Phe Thr His His Ala His Thr Ala Ser Leu Ser Ala Val
 35 40 45
 Ala Val Asn Ser Arg Phe Val Val Thr Gly Ser Lys Asp Glu Thr Ile
 50 55 60
 His Ile Tyr Asp Met Lys Lys Lys Ile Glu His Gly Ala Leu Val His
 65 70 75 80
 His Ser Gly Thr Ile Thr Cys Leu Lys Phe Tyr Gly Asn Arg His Leu
 85 90 95
 Ile Ser Gly Ala Glu Asp Gly Leu Ile Cys Ile Trp Asp Ala Lys Lys
 100 105 110
 Trp Glu Cys Leu Lys Ser Ile Lys Ala His Lys Gly Gln Val Thr Phe
 115 120 125
 Leu Ser Ile His Pro Ser Gly Lys Leu Ala Leu Ser Val Gly Thr Asp
 130 135 140
 Lys Thr Leu Arg Thr Trp Asn Leu Val Glu Gly Arg Ser Ala Phe Ile
 145 150 155 160
 Lys Asn Ile Lys Gln Asn Ala His Ile Val Glu Trp Ser Pro Arg Gly
 165 170 175
 Glu Gln Tyr Val Val Ile Ile Gln Asn Lys Ile Asp Ile Tyr Gln Leu
 180 185 190

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		195					200					205			
Ser	Val	Lys	Phe	Leu	Ser	Glu	Ser	Val	Leu	Ala	Val	Ala	Gly	Asp	Glu
		210				215					220				
Glu	Val	Ile	Arg	Phe	Phe	Asp	Cys	Asp	Ser	Leu	Val	Cys	Leu	Cys	Glu
225					230					235					240
Phe	Lys	Ala	His	Glu	Asn	Arg	Val	Lys	Asp	Met	Phe	Ser	Phe	Glu	Ile
			245						250					255	
Pro	Glu	His	His	Val	Ile	Val	Ser	Ala	Ser	Ser	Asp	Gly	Phe	Ile	Lys
			260					265					270		
Met	Trp	Lys	Leu	Lys	Gln	Asp	Lys	Lys	Val	Pro	Pro	Ser	Leu	Leu	Cys
		275					280					285			
Glu	Ile	Asn	Thr	Asn	Ala	Arg	Leu	Thr	Cys	Leu	Gly	Val	Trp	Leu	Asp
		290				295					300				
Lys	Val	Ala	Asp	Met	Lys	Glu	Ser	Leu	Pro	Pro	Ala	Ala	Glu	Pro	Ser
305					310					315					320
Pro	Val	Ser	Lys	Glu	Gln	Ser	Lys	Ile	Gly	Lys	Lys	Glu	Pro	Gly	Asp
			325						330					335	
Thr	Val	His	Lys	Glu	Glu	Lys	Arg	Ser	Lys	Pro	Asn	Thr	Lys	Lys	Arg
			340					345					350		
Gly	Leu	Thr	Gly	Asp	Ser	Lys	Lys	Ala	Thr	Lys	Glu	Ser	Gly	Leu	Ile
		355				360					365				
Ser	Thr	Lys	Lys	Arg	Lys	Met	Val	Glu	Met	Leu	Glu	Lys	Lys	Arg	Lys
		370				375					380				
Lys	Lys	Lys	Ile	Lys	Pro	Met	Gln	*							
385					390		392								

<210> 1755

<211> 267

<212> PRT

<213> Homo sapiens

<400> 1755

Met	Glu	Met	Lys	Lys	Lys	Ile	Asn	Leu	Glu	Leu	Arg	Asn	Arg	Ser	Pro
1				5					10					15	
Glu	Glu	Val	Thr	Glu	Leu	Val	Leu	Asp	Asn	Cys	Leu	Cys	Val	Asn	Gly
			20					25					30		
Glu	Ile	Glu	Gly	Leu	Asn	Asp	Thr	Phe	Lys	Glu	Leu	Glu	Phe	Leu	Ser
			35				40					45			
Met	Ala	Asn	Val	Glu	Leu	Ser	Ser	Leu	Ala	Arg	Leu	Pro	Ser	Leu	Asn
		50				55					60				
Lys	Leu	Arg	Lys	Leu	Glu	Leu	Ser	Asp	Asn	Ile	Ile	Ser	Gly	Gly	Leu
65					70					75					80
Glu	Val	Leu	Ala	Glu	Lys	Cys	Pro	Asn	Leu	Thr	Tyr	Leu	Asn	Leu	Ser
			85						90					95	
Gly	Asn	Lys	Ile	Lys	Asp	Leu	Ser	Thr	Val	Glu	Ala	Leu	Gln	Asn	Leu
			100					105					110		
Lys	Asn	Leu	Lys	Ser	Leu	Asp	Leu	Phe	Asn	Cys	Glu	Ile	Thr	Asn	Leu
		115				120						125			
Glu	Asp	Tyr	Arg	Glu	Ser	Ile	Phe	Glu	Leu	Leu	Gln	Gln	Ile	Thr	Tyr
		130				135					140				
Leu	Asp	Gly	Phe	Asp	Gln	Glu	Asp	Asn	Glu	Ala	Pro	Asp	Ser	Glu	Glu
145					150					155					160
Glu	Asp	Asp	Glu	Asp	Gly	Asp	Glu	Asp	Asp	Glu	Glu	Glu	Glu	Glu	Asn
				165					170					175	
Glu	Ala	Gly	Pro	Pro	Glu	Gly	Tyr	Glu	Glu	Glu	Glu	Glu	Glu	Glu	Glu
			180					185					190		
Asp	Glu	Asp	Glu	Asp	Glu	Asp	Glu	Asp	Glu	Ala	Gly	Ser	Glu	Leu	Gly
		195				200						205			
Glu	Gly	Glu	Glu	Glu	Val	Gly	Leu	Ser	Tyr	Leu	Met	Lys	Glu	Glu	Ile
		210				215						220			

Gln Asp Glu Glu Asp Asp Asp Asp Tyr Val Glu Glu Gly Glu Glu Glu
 225 230 235 240
 Glu Glu Glu Glu Glu Gly Gly Leu Arg Gly Glu Lys Arg Lys Arg Asp
 245 250 255
 Ala Glu Asp Asp Gly Glu Glu Glu Asp Asp *
 260 265 266

<210> 1756

<211> 238

<212> PRT

<213> Homo sapiens

<400> 1756

Met Ala Leu Glu Ala Ala Gly Gly Pro Pro Glu Glu Thr Leu Ser Leu
 1 5 10 15
 Trp Lys Arg Glu Gln Ala Arg Leu Lys Ala His Val Val Asp Arg Asp
 20 25 30
 Thr Glu Ala Trp Gln Arg Asp Pro Ala Phe Ser Gly Leu Gln Arg Val
 35 40 45
 Gly Gly Val Asp Val Ser Phe Val Lys Gly Asp Ser Val Arg Ala Cys
 50 55 60
 Ala Ser Leu Val Val Leu Ser Phe Pro Glu Leu Glu Val Leu Leu Val
 65 70 75 80
 Asp Gly Asn Gly Val Leu His His Arg Gly Phe Gly Val Ala Cys His
 85 90 95
 Leu Gly Val Leu Thr Asp Leu Pro Cys Val Gly Val Ala Lys Lys Leu
 100 105 110
 Leu Gln Val Asp Gly Leu Glu Asn Asn Ala Leu His Lys Glu Lys Ile
 115 120 125
 Arg Leu Leu Gln Thr Arg Gly Asp Ser Phe Pro Leu Leu Gly Asp Ser
 130 135 140
 Gly Thr Val Leu Gly Met Ala Leu Arg Ser His Asp Arg Ser Thr Arg
 145 150 155 160
 Pro Leu Tyr Ile Ser Val Gly His Arg Met Ser Leu Glu Ala Ala Val
 165 170 175
 Arg Leu Thr Cys Cys Cys Cys Arg Phe Arg Ile Pro Glu Pro Val Arg
 180 185 190
 Gln Ala Asp Ile Cys Ser Arg Glu His Ile Arg Lys Ser Leu Gly Leu
 195 200 205
 Pro Gly Pro Pro Thr Pro Arg Ser Pro Lys Ala Gln Arg Pro Val Ala
 210 215 220
 Cys Pro Lys Gly Asp Ser Gly Glu Ser Ser Ala Leu Cys *
 225 230 235 237

<210> 1757

<211> 283

<212> PRT

<213> Homo sapiens

<400> 1757

Met Ala Leu Glu Ala Ala Gly Gly Pro Pro Glu Glu Thr Leu Ser Leu
 1 5 10 15
 Trp Lys Arg Glu Gln Ala Arg Leu Lys Ala His Val Val Asp Arg Asp
 20 25 30
 Thr Glu Ala Trp Gln Arg Asp Pro Ala Phe Ser Gly Leu Gln Arg Val
 35 40 45
 Gly Gly Val Asp Val Ser Phe Val Lys Gly Asp Ser Val Arg Ala Cys
 50 55 60

Ala	Ser	Leu	Val	Val	Leu	Ser	Phe	Pro	Glu	Leu	Glu	Val	Val	Tyr	Glu
65					70					75					80
Glu	Ser	Arg	Met	Val	Ser	Leu	Thr	Ala	Pro	Tyr	Val	Ser	Gly	Phe	Leu
			85						90					95	
Ala	Phe	Arg	Glu	Val	Pro	Phe	Leu	Leu	Glu	Leu	Val	Gln	Gln	Leu	Arg
			100					105					110		
Glu	Lys	Glu	Pro	Gly	Leu	Met	Pro	Gln	Val	Leu	Leu	Val	Asp	Gly	Asn
		115					120					125			
Gly	Val	Leu	His	His	Arg	Gly	Phe	Gly	Val	Ala	Cys	His	Leu	Gly	Val
		130				135					140				
Leu	Thr	Asp	Leu	Pro	Cys	Val	Gly	Val	Ala	Lys	Lys	Leu	Leu	Gln	Val
145					150					155					160
Asp	Gly	Leu	Glu	Asn	Asn	Ala	Leu	His	Lys	Glu	Lys	Ile	Arg	Leu	Leu
				165					170					175	
Gln	Thr	Arg	Gly	Asp	Ser	Phe	Pro	Leu	Leu	Gly	Asp	Ser	Gly	Thr	Val
			180					185					190		
Leu	Gly	Met	Ala	Leu	Arg	Ser	His	Asp	Arg	Ser	Thr	Arg	Pro	Leu	Tyr
		195					200					205			
Ile	Ser	Val	Gly	His	Arg	Met	Ser	Leu	Glu	Ala	Ala	Val	Arg	Leu	Thr
		210				215						220			
Cys	Cys	Cys	Cys	Arg	Phe	Arg	Ile	Pro	Glu	Pro	Val	Arg	Gln	Ala	Asp
225					230					235					240
Ile	Cys	Ser	Arg	Glu	His	Ile	Arg	Lys	Ser	Leu	Gly	Leu	Pro	Gly	Pro
				245				250						255	
Pro	Thr	Pro	Arg	Ser	Pro	Lys	Ala	Gln	Arg	Pro	Val	Ala	Cys	Pro	Lys
			260					265					270		
Gly	Asp	Ser	Gly	Glu	Ser	Ser	Ala	Leu	Cys	*					
		275					280		282						

<210> 1758

<211> 1029

<212> PRT

<213> Homo sapiens

<400> 1758

Met	Asn	Leu	Phe	Asn	Leu	Asp	Arg	Phe	Gly	Phe	Glu	Lys	Arg	Asn	Lys
1				5					10					15	
Ile	Glu	Glu	Ala	Pro	Glu	Ala	Thr	Pro	Gln	Pro	Ser	Gln	Pro	Gly	Pro
			20					25					30		
Ser	Ser	Pro	Ile	Ser	Leu	Ser	Ala	Glu	Glu	Glu	Asn	Ala	Glu	Gly	Glu
		35					40					45			
Val	Ser	Arg	Ala	Asn	Thr	Pro	Asp	Ser	Asp	Ile	Thr	Glu	Lys	Thr	Glu
		50				55					60				
Asp	Ser	Ser	Val	Pro	Glu	Thr	Pro	Asp	Asn	Glu	Arg	Lys	Ala	Ser	Ile
65					70					75					80
Ser	Tyr	Phe	Lys	Asn	Gln	Arg	Gly	Ile	Gln	Tyr	Ile	Asp	Leu	Ser	Ser
			85						90					95	
Asp	Ser	Glu	Asp	Val	Val	Ser	Pro	Asn	Cys	Ser	Asn	Thr	Val	Gln	Glu
			100					105					110		
Lys	Thr	Phe	Asn	Lys	Asp	Thr	Val	Ile	Ile	Val	Ser	Glu	Pro	Ser	Glu
		115					120					125			
Asp	Glu	Glu	Ser	Gln	Gly	Leu	Pro	Thr	Met	Ala	Arg	Arg	Asn	Asp	Asp
		130				135					140				
Ile	Ser	Glu	Leu	Glu	Asp	Leu	Ser	Glu	Leu	Glu	Asp	Leu	Lys	Asp	Ala
145					150					155					160
Lys	Leu	Gln	Thr	Leu	Lys	Glu	Leu	Phe	Pro	Gln	Arg	Ser	Asp	Asn	Asp
				165					170					175	
Leu	Leu	Lys	Leu	Ile	Glu	Ser	Thr	Ser	Thr	Met	Asp	Gly	Ala	Ile	Ala
			180					185					190		
Ala	Ala	Leu	Leu	Met	Phe	Gly	Asp	Ala	Gly	Gly	Gly	Pro	Arg	Lys	Arg
		195					200					205			

Lys	Leu	Ser	Ser	Ser	Ser	Glu	Pro	Tyr	Glu	Glu	Asp	Glu	Phe	Asn	Asp
210						215					220				
Asp	Gln	Ser	Ile	Lys	Lys	Thr	Arg	Leu	Asp	His	Gly	Glu	Glu	Ser	Asn
225				230						235					240
Glu	Ser	Ala	Glu	Ser	Ser	Ser	Asn	Trp	Glu	Lys	Gln	Glu	Ser	Ile	Val
				245					250					255	
Leu	Lys	Leu	Gln	Lys	Glu	Phe	Pro	Asn	Phe	Asp	Lys	Gln	Glu	Leu	Arg
			260					265					270		
Glu	Val	Leu	Lys	Glu	His	Glu	Trp	Met	Tyr	Thr	Glu	Ala	Leu	Glu	Ser
		275					280					285			
Leu	Lys	Val	Phe	Ala	Glu	Asp	Gln	Asp	Met	Gln	Tyr	Ala	Ser	Gln	Ser
		290				295					300				
Glu	Val	Pro	Asn	Gly	Lys	Glu	Val	Ser	Ser	Arg	Ser	Gln	Asn	Tyr	Pro
305				310						315					320
Lys	Asn	Ala	Thr	Lys	Thr	Lys	Leu	Lys	Gln	Lys	Phe	Ser	Met	Lys	Ala
				325					330					335	
Gln	Asn	Gly	Phe	Asn	Lys	Lys	Lys	Lys	Lys	Asn	Val	Phe	Asn	Pro	Lys
			340					345					350		
Arg	Val	Val	Glu	Asp	Ser	Glu	Tyr	Asp	Ser	Gly	Ser	Asp	Val	Gly	Ser
		355					360					365			
Ser	Leu	Asp	Glu	Asp	Tyr	Ser	Ser	Gly	Glu	Glu	Val	Met	Glu	Asp	Gly
		370				375					380				
Tyr	Lys	Gly	Lys	Ile	Leu	His	Phe	Leu	Gln	Asp	Ala	Ser	Ile	Gly	Glu
385				390						395					400
Leu	Thr	Leu	Ile	Pro	Gln	Cys	Ser	Gln	Lys	Lys	Ala	Gln	Lys	Ile	Thr
				405					410					415	
Glu	Leu	Arg	Pro	Phe	Asn	Ser	Trp	Glu	Ala	Leu	Phe	Thr	Lys	Met	Ser
			420					425					430		
Lys	Thr	Asn	Gly	Leu	Ser	Glu	Asp	Leu	Ile	Trp	His	Cys	Lys	Thr	Leu
		435					440					445			
Ile	Gln	Glu	Arg	Asp	Val	Val	Ile	Arg	Leu	Met	Asn	Lys	Cys	Glu	Asp
		450				455					460				
Ile	Ser	Asn	Lys	Leu	Thr	Lys	Gln	Val	Thr	Met	Leu	Thr	Gly	Asn	Gly
465				470						475					480
Gly	Gly	Trp	Asn	Ile	Glu	Gln	Pro	Ser	Ile	Leu	Asn	Gln	Ser	Leu	Ser
			485						490					495	
Leu	Lys	Pro	Tyr	Gln	Lys	Val	Gly	Leu	Asn	Trp	Leu	Ala	Leu	Val	His
			500					505					510		
Lys	His	Gly	Leu	Asn	Gly	Ile	Leu	Ala	Asp	Glu	Met	Gly	Leu	Gly	Lys
		515					520					525			
Thr	Ile	Gln	Ala	Ile	Ala	Phe	Leu	Ala	Tyr	Leu	Tyr	Gln	Glu	Gly	Asn
		530				535					540				
Asn	Gly	Pro	His	Leu	Ile	Val	Val	Pro	Ala	Ser	Thr	Ile	Asp	Asn	Trp
545				550						555					560
Leu	Arg	Glu	Val	Asn	Leu	Trp	Cys	Pro	Thr	Leu	Lys	Val	Leu	Cys	Tyr
			565						570					575	
Tyr	Gly	Ser	Gln	Glu	Glu	Arg	Lys	Gln	Ile	Arg	Phe	Asn	Ile	His	Ser
			580					585					590		
Arg	Tyr	Glu	Asp	Tyr	Asn	Val	Ile	Val	Thr	Thr	Tyr	Asn	Cys	Ala	Ile
		595					600					605			
Ser	Ser	Ser	Asp	Asp	Arg	Ser	Leu	Phe	Arg	Arg	Leu	Lys	Leu	Asn	Tyr
		610				615					620				
Ala	Ile	Phe	Asp	Glu	Gly	His	Met	Leu	Lys	Asn	Met	Gly	Ser	Ile	Arg
625				630						635					640
Tyr	Gln	His	Leu	Met	Thr	Ile	Asn	Ala	Asn	Asn	Arg	Leu	Leu	Leu	Thr
			645						650					655	
Gly	Thr	Pro	Val	Gln	Asn	Asn	Leu	Leu	Glu	Leu	Met	Ser	Leu	Leu	Asn
			660					665					670		
Phe	Val	Met	Pro	His	Met	Phe	Ser	Ser	Ser	Thr	Ser	Glu	Ile	Arg	Arg
		675					680					685			
Met	Phe	Ser	Ser	Lys	Thr	Lys	Ser	Ala	Asp	Glu	Gln	Ser	Ile	Tyr	Glu
		690				695					700				
Lys	Glu	Arg	Ile	Ala	His	Ala	Lys	Gln	Ile	Ile	Lys	Pro	Phe	Ile	Leu
705				710						715					720

Arg Arg Val Lys Glu Glu Val Leu Lys Gln Leu Pro Pro Lys Lys Asp
 725 730 735
 Arg Ile Glu Leu Cys Ala Met Ser Glu Lys Gln Glu Gln Leu Tyr Leu
 740 745 750
 Gly Leu Phe Asn Arg Leu Lys Lys Ser Ile Asn Asn Leu Val Thr Glu
 755 760 765
 Lys Asn Thr Glu Met Cys Asn Val Met Met Gln Leu Arg Lys Met Ala
 770 775 780
 Asn His Pro Leu Leu His Arg Gln Tyr Tyr Thr Ala Glu Lys Leu Lys
 785 790 795 800
 Glu Met Ser Gln Leu Met Leu Lys Glu Pro Thr His Cys Glu Ala Asn
 805 810 815
 Pro Asp Leu Ile Phe Glu Asp Met Glu Val Met Thr Asp Phe Glu Leu
 820 825 830
 His Val Leu Cys Lys Gln Tyr Arg His Ile Asn Asn Phe Gln Leu Asp
 835 840 845
 Met Asp Leu Ile Leu Asp Ser Gly Lys Phe Arg Val Leu Gly Cys Ile
 850 855 860
 Leu Ser Glu Leu Lys Gln Lys Gly Asp Arg Val Val Leu Phe Ser Gln
 865 870 875 880
 Phe Thr Met Met Leu Asp Ile Leu Glu Val Leu Leu Lys His His Gln
 885 890 895
 His Arg Tyr Leu Arg Leu Asp Gly Lys Thr Gln Ile Ser Glu Arg Ile
 900 905 910
 His Leu Ile Asp Glu Phe Asn Thr Asp Met Asp Ile Phe Val Phe Leu
 915 920 925
 Leu Ser Thr Lys Ala Gly Gly Leu Gly Ile Asn Leu Thr Ser Ala Asn
 930 935 940
 Val Val Ile Leu His Asp Ile Asp Cys Asn Pro Tyr Asn Asp Lys Gln
 945 950 955 960
 Ala Glu Asp Arg Cys His Arg Val Gly Gln Thr Lys Glu Val Leu Val
 965 970 975
 Ile Lys Leu Ile Ser Gln Gly Thr Ile Glu Glu Ser Met Leu Lys Ile
 980 985 990
 Asn Gln Gln Lys Leu Lys Leu Glu Gln Asp Met Thr Thr Val Asp Glu
 995 1000 1005
 Gly Asp Glu Gly Ser Met Pro Ala Asp Ile Ala Thr Leu Leu Lys Thr
 1010 1015 1020
 Ser Met Gly Leu *
 1025 1028

<210> 1759

<211> 300

<212> PRT

<213> Homo sapiens

<400> 1759

Met Gln Leu Pro Leu Arg Asn Ser Arg Val Asp Gly Phe Val Ser Asn
 1 5 10 15
 Leu Val Gly Ala Arg Ile Pro Arg Gly Lys Val Ile Thr Thr Ala Arg
 20 25 30
 Gly Ser Ser Thr Gly Glu Leu Glu Gly His Ala Ser Ser Arg Leu Pro
 35 40 45
 Pro Gln Pro Cys Gly Trp Gly Gln Ser Ser Asp Leu Leu Ser Arg Ile
 50 55 60
 Asp Leu Asp Glu Leu Met Lys Lys Asp Glu Pro Pro Leu Asp Phe Pro
 65 70 75 80
 Asp Thr Leu Glu Gly Phe Glu Tyr Ala Phe Asn Glu Lys Gly Gln Leu
 85 90 95
 Arg His Ile Lys Thr Gly Glu Pro Phe Val Phe Asn Tyr Arg Glu Asp
 100 105 110

Leu	His	Arg	Trp	Asn	Gln	Lys	Arg	Tyr	Glu	Ala	Leu	Gly	Glu	Ile	Ile
	115						120					125			
Thr	Lys	Tyr	Val	Tyr	Glu	Leu	Leu	Glu	Lys	Asp	Cys	Asn	Leu	Lys	Lys
	130					135					140				
Val	Ser	Ile	Pro	Val	Asp	Ala	Thr	Glu	Ser	Glu	Pro	Lys	Ser	Phe	Ile
145					150					155					160
Phe	Met	Ser	Glu	Asp	Ala	Leu	Thr	Asn	Pro	Gln	Lys	Leu	Met	Val	Leu
				165				170						175	
Ile	His	Gly	Ser	Gly	Val	Val	Arg	Ala	Gly	Gln	Trp	Ala	Arg	Arg	Leu
		180					185					190			
Ile	Ile	Asn	Glu	Asp	Leu	Asp	Ser	Gly	Thr	Gln	Ile	Pro	Phe	Ile	Lys
	195					200						205			
Arg	Ala	Val	Ala	Glu	Gly	Tyr	Gly	Val	Ile	Val	Leu	Asn	Pro	Asn	Glu
	210				215						220				
Asn	Tyr	Ile	Glu	Val	Glu	Lys	Pro	Lys	Ile	His	Val	Gln	Ser	Ser	Ser
225					230					235					240
Asp	Ser	Ser	Asp	Glu	Pro	Ala	Glu	Lys	Arg	Glu	Arg	Lys	Asp	Lys	Val
				245				250						255	
Ser	Lys	Glu	Thr	Lys	Lys	Arg	Arg	Asp	Phe	Tyr	Glu	Lys	Tyr	Arg	Asn
			260					265					270		
Asn	Lys	Lys	Lys	Lys	Lys	Lys	Thr	Gln	Lys	Gly	Gly	Gln	Val	Gln	Gln
	275						280					285			
Tyr	Asn	Leu	Ile	Met	Ser	His	Asn	Thr	Ile	His	*				
	290					295				299					

<210> 1760

<211> 1054

<212> PRT

<213> Homo sapiens

<400> 1760

Met	Ala	Leu	Asp	Asn	Leu	Leu	Ala	Asn	Leu	Pro	Pro	Ala	Lys	Pro	Gly
1				5					10					15	
Lys	Ser	Ser	Ser	Leu	Glu	Met	Thr	Pro	Tyr	Asn	Thr	Pro	Gln	Leu	Ser
			20					25					30		
Pro	Ala	Thr	Thr	Pro	Ala	Asn	Lys	Lys	Asn	Arg	Leu	Pro	Ile	Ala	Thr
		35				40						45			
Arg	Ser	Arg	Ser	Arg	Thr	Asn	Met	Leu	Met	Asp	Leu	His	Met	Asp	His
	50					55					60				
Glu	Gly	Ser	Ser	Gln	Glu	Thr	Ile	Gln	Glu	Val	Gln	Pro	Glu	Glu	Val
65				70						75				80	
Leu	Val	Ile	Ser	Leu	Gly	Thr	Gly	Pro	Gln	Leu	Thr	Pro	Gly	Met	Met
				85				90						95	
Ser	Glu	Asn	Glu	Val	Leu	Asn	Met	Gln	Leu	Ser	Asp	Gly	Gly	Gln	Gly
			100					105					110		
Asp	Val	Pro	Val	Asp	Glu	Asn	Lys	Leu	His	Gly	Lys	Pro	Asp	Lys	Thr
	115						120					125			
Leu	Arg	Phe	Ser	Leu	Cys	Ser	Asp	Asn	Leu	Glu	Gly	Ile	Ser	Glu	Gly
	130					135					140				
Pro	Ser	Asn	Arg	Ser	Asn	Ser	Val	Ser	Ser	Leu	Asp	Leu	Glu	Gly	Glu
145					150					155					160
Ser	Val	Ser	Glu	Leu	Gly	Ala	Gly	Pro	Ser	Gly	Ser	Asn	Gly	Val	Glu
				165				170						175	
Ala	Leu	Gln	Leu	Leu	Glu	His	Glu	Gln	Ala	Thr	Thr	Gln	Asp	Asn	Leu
			180					185					190		
Asp	Asp	Lys	Leu	Arg	Lys	Phe	Glu	Ile	Arg	Asp	Met	Met	Gly	Leu	Thr
	195						200					205			
Asp	Asp	Arg	Asp	Ile	Ser	Glu	Thr	Val	Ser	Glu	Thr	Trp	Ser	Thr	Asp
	210					215					220				
Val	Leu	Gly	Ser	Asp	Phe	Asp	Pro	Asn	Ile	Asp	Glu	Asp	Arg	Leu	Gln
225					230					235					240

Glu	Ile	Ala	Gly	Ala	Ala	Ala	Glu	Asn	Met	Leu	Gly	Ser	Leu	Leu	Cys
			245						250					255	
Leu	Pro	Gly	Ser	Gly	Ser	Val	Leu	Leu	Asp	Pro	Cys	Thr	Gly	Ser	Thr
			260						265					270	
Ile	Ser	Glu	Thr	Thr	Ser	Glu	Ala	Trp	Ser	Val	Glu	Val	Leu	Pro	Ser
			275					280					285		
Asp	Ser	Glu	Ala	Pro	Asp	Leu	Lys	Gln	Glu	Glu	Arg	Leu	Gln	Glu	Leu
			290				295				300				
Glu	Ser	Cys	Ser	Gly	Leu	Gly	Ser	Thr	Ser	Asp	Asp	Thr	Asp	Val	Arg
305					310					315					320
Glu	Val	Ser	Ser	Arg	Pro	Ser	Thr	Pro	Gly	Leu	Ser	Val	Val	Ser	Gly
				325					330					335	
Ile	Ser	Ala	Thr	Ser	Glu	Asp	Ile	Pro	Asn	Lys	Ile	Glu	Asp	Leu	Arg
			340					345					350		
Ser	Glu	Cys	Ser	Ser	Asp	Phe	Gly	Gly	Lys	Asp	Ser	Val	Thr	Ser	Pro
			355				360					365			
Asp	Met	Asp	Glu	Ile	Thr	His	Asp	Phe	Leu	Tyr	Ile	Leu	Gln	Pro	Lys
			370			375					380				
Gln	His	Phe	Gln	His	Ile	Glu	Ala	Glu	Ala	Asp	Met	Arg	Ile	Gln	Leu
385					390					395					400
Ser	Ser	Ser	Ala	His	Gln	Leu	Thr	Ser	Pro	Pro	Ser	Gln	Ser	Glu	Ser
				405					410					415	
Leu	Leu	Ala	Met	Phe	Asp	Pro	Leu	Ser	Ser	His	Glu	Gly	Ala	Ser	Ala
			420					425					430		
Val	Val	Arg	Pro	Lys	Val	His	Tyr	Ala	Arg	Pro	Ser	His	Pro	Pro	Pro
			435				440					445			
Asp	Pro	Pro	Ile	Leu	Glu	Gly	Ala	Val	Gly	Gly	Asn	Glu	Ala	Arg	Leu
			450			455					460				
Pro	Asn	Phe	Gly	Ser	His	Val	Leu	Thr	Pro	Ala	Glu	Met	Glu	Ala	Phe
465					470					475					480
Lys	Gln	Arg	His	Ser	Tyr	Pro	Glu	Arg	Leu	Val	Arg	Ser	Arg	Ser	Ser
				485					490					495	
Asp	Ile	Val	Ser	Ser	Val	Arg	Arg	Pro	Met	Ser	Asp	Pro	Ser	Trp	Asn
			500					505					510		
Arg	Arg	Pro	Gly	Asn	Glu	Glu	Arg	Glu	Leu	Pro	Pro	Ala	Ala	Ala	Ile
			515				520					525			
Gly	Ala	Thr	Ser	Leu	Val	Ala	Ala	Pro	His	Ser	Ser	Ser	Ser	Ser	Pro
			530			535					540				
Ser	Lys	Asp	Ser	Ser	Arg	Gly	Glu	Thr	Glu	Glu	Arg	Lys	Asp	Ser	Asp
545					550					555					560
Asp	Glu	Lys	Ser	Asp	Arg	Asn	Arg	Pro	Trp	Trp	Arg	Lys	Arg	Phe	Val
				565					570					575	
Ser	Ala	Met	Pro	Lys	Ala	Pro	Ile	Pro	Phe	Arg	Lys	Lys	Glu	Lys	Gln
			580					585					590		
Glu	Lys	Asp	Lys	Asp	Asp	Leu	Gly	Pro	Asp	Arg	Phe	Ser	Thr	Leu	Thr
			595				600					605			
Asp	Asp	Pro	Ser	Pro	Arg	Leu	Ser	Ala	Gln	Ala	Gln	Val	Ala	Glu	Asp
			610			615					620				
Ile	Leu	Asp	Lys	Tyr	Arg	Asn	Ala	Ile	Lys	Arg	Thr	Ser	Pro	Ser	Asp
625					630					635					640
Gly	Ala	Met	Ala	Asn	Tyr	Glu	Ser	Thr	Glu	Val	Met	Gly	Asp	Gly	Glu
				645					650					655	
Ser	Ala	His	Asp	Ser	Pro	Arg	Asp	Glu	Ala	Leu	Gln	Asn	Ile	Ser	Ala
			660					665					670		
Asp	Asp	Leu	Pro	Asp	Ser	Ala	Ser	Gln	Ala	Ala	His	Pro	Gln	Asp	Ser
			675				680						685		
Ala	Phe	Ser	Tyr	Arg	Asp	Ala	Lys	Lys	Lys	Leu	Arg	Leu	Ala	Leu	Cys
			690			695					700				
Ser	Ala	Asp	Ser	Val	Ala	Phe	Pro	Val	Leu	Thr	His	Ser	Thr	Arg	Asn
705					710					715					720
Gly	Leu	Pro	Asp	His	Thr	Asp	Pro	Glu	Asp	Asn	Glu	Ile	Val	Cys	Phe
				725					730					735	
Leu	Lys	Val	Gln	Ile	Ala	Glu	Ala	Ile	Asn	Leu	Gln	Asp	Lys	Asn	Leu
			740					745					750		

Met	Ala	Gln	Leu	Gln	Glu	Thr	Met	Arg	Cys	Val	Cys	Arg	Phe	Asp	Asn
	755						760					765			
Arg	Thr	Cys	Arg	Lys	Leu	Leu	Ala	Ser	Ile	Ala	Glu	Asp	Tyr	Arg	Lys
	770						775					780			
Arg	Ala	Pro	Tyr	Ile	Ala	Tyr	Leu	Thr	Arg	Cys	Arg	Gln	Gly	Leu	Gln
785					790					795					800
Thr	Thr	Gln	Ala	His	Leu	Glu	Arg	Leu	Leu	Gln	Arg	Val	Leu	Arg	Asp
				805					810						815
Lys	Glu	Val	Ala	Asn	Arg	Tyr	Phe	Thr	Thr	Val	Cys	Val	Arg	Leu	Leu
			820					825					830		
Leu	Glu	Ser	Lys	Glu	Lys	Lys	Ile	Arg	Glu	Phe	Ile	Gln	Asp	Phe	Gln
	835						840					845			
Lys	Leu	Thr	Ala	Ala	Asp	Asp	Lys	Thr	Ala	Gln	Val	Glu	Asp	Phe	Leu
	850					855					860				
Gln	Phe	Leu	Tyr	Gly	Ala	Met	Ala	Gln	Asp	Val	Ile	Trp	Gln	Asn	Ala
865					870					875					880
Ser	Glu	Glu	Gln	Leu	Gln	Asp	Ala	Gln	Leu	Ala	Ile	Glu	Arg	Ser	Val
				885					890						895
Met	Asn	Arg	Ile	Phe	Lys	Leu	Ala	Phe	Tyr	Pro	Asn	Gln	Asp	Gly	Asp
			900					905					910		
Ile	Leu	Arg	Asp	Gln	Val	Leu	His	Glu	His	Ile	Gln	Arg	Leu	Ser	Lys
	915						920					925			
Val	Val	Thr	Ala	Asn	His	Arg	Ala	Leu	Gln	Ile	Pro	Glu	Val	Tyr	Leu
	930					935						940			
Arg	Glu	Ala	Pro	Trp	Pro	Ser	Ala	Gln	Ser	Glu	Ile	Arg	Thr	Ile	Ser
945					950					955					960
Ala	Tyr	Lys	Thr	Pro	Arg	Asp	Lys	Val	Gln	Cys	Ile	Leu	Arg	Met	Cys
				965					970					975	
Ser	Thr	Ile	Met	Asn	Leu	Leu	Ser	Leu	Ala	Asn	Glu	Asp	Ser	Val	Pro
			980					985					990		
Gly	Ala	Asp	Asp	Phe	Val	Pro	Val	Leu	Val	Phe	Val	Leu	Ile	Lys	Ala
	995					1000						1005			
Asn	Pro	Pro	Cys	Leu	Leu	Ser	Thr	Val	Gln	Tyr	Ile	Ser	Ser	Phe	Tyr
	1010					1015					1020				
Ala	Ser	Cys	Leu	Ser	Gly	Glu	Glu	Ser	Tyr	Trp	Trp	Met	Gln	Phe	Thr
1025					1030					1035					1040
Ala	Ala	Val	Glu	Phe	Ile	Lys	Thr	Ile	Asp	Asp	Arg	Lys	*		
				1045					1050			1053			

<210> 1761

<211> 1027

<212> PRT

<213> Homo sapiens

<400> 1761

Met	Ala	Leu	Asp	Asn	Leu	Leu	Ala	Asn	Leu	Pro	Pro	Ala	Lys	Pro	Gly
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Lys	Ser	Ser	Ser	Leu	Glu	Met	Thr	Pro	Tyr	Asn	Thr	Pro	Gln	Leu	Ser
			20					25					30		
Pro	Ala	Thr	Thr	Pro	Ala	Asn	Lys	Lys	Asn	Arg	Leu	Pro	Ile	Ala	Thr
		35					40					45			
Arg	Ser	Arg	Ser	Arg	Thr	Asn	Met	Leu	Met	Asp	Leu	His	Met	Asp	His
	50					55					60				
Glu	Gly	Ser	Ser	Gln	Glu	Thr	Ile	Gln	Glu	Val	Gln	Pro	Glu	Glu	Val
65					70					75					80
Leu	Val	Ile	Ser	Leu	Gly	Thr	Gly	Pro	Gln	Leu	Thr	Pro	Gly	Met	Met
				85					90					95	
Ser	Glu	Asn	Glu	Val	Leu	Asn	Met	Gln	Leu	Ser	Asp	Gly	Gly	Gln	Gly
			100					105					110		
Asp	Val	Pro	Val	Asp	Glu	Asn	Lys	Leu	His	Gly	Lys	Pro	Asp	Lys	Thr
			115				120								

Leu	Arg	Phe	Ser	Leu	Cys	Ser	Asp	Asn	Leu	Glu	Gly	Ile	Ser	Glu	Gly
130						135					140				
Pro	Ser	Asn	Arg	Ser	Asn	Ser	Val	Ser	Ser	Leu	Asp	Leu	Glu	Gly	Glu
145					150					155					160
Ser	Val	Ser	Glu	Leu	Gly	Ala	Gly	Pro	Ser	Gly	Ser	Asn	Gly	Val	Glu
				165					170					175	
Ala	Leu	Gln	Leu	Leu	Glu	His	Glu	Gln	Ala	Thr	Thr	Gln	Asp	Asn	Leu
			180					185					190		
Asp	Asp	Lys	Leu	Arg	Lys	Phe	Glu	Ile	Arg	Asp	Met	Met	Gly	Leu	Thr
	195						200				205				
Asp	Asp	Arg	Asp	Ile	Ser	Glu	Thr	Val	Ser	Glu	Thr	Trp	Ser	Thr	Asp
	210					215					220				
Val	Leu	Gly	Ser	Asp	Phe	Asp	Pro	Asn	Ile	Asp	Glu	Asp	Arg	Leu	Gln
225					230					235					240
Glu	Ile	Ala	Gly	Ala	Ala	Ala	Glu	Asn	Met	Leu	Gly	Ser	Leu	Leu	Cys
				245				250						255	
Leu	Pro	Gly	Ser	Gly	Ser	Val	Leu	Leu	Asp	Pro	Cys	Thr	Gly	Ser	Thr
			260					265					270		
Ile	Ser	Glu	Thr	Thr	Ser	Glu	Ala	Trp	Ser	Val	Glu	Val	Leu	Pro	Ser
	275						280					285			
Asp	Ser	Glu	Ala	Pro	Asp	Leu	Lys	Gln	Glu	Glu	Arg	Leu	Gln	Glu	Leu
	290					295					300				
Glu	Ser	Cys	Ser	Gly	Leu	Gly	Ser	Thr	Ser	Asp	Asp	Thr	Asp	Val	Arg
305					310					315					320
Glu	Val	Ser	Ser	Arg	Pro	Ser	Thr	Pro	Gly	Leu	Ser	Val	Val	Ser	Gly
				325					330					335	
Ile	Ser	Ala	Thr	Ser	Glu	Asp	Ile	Pro	Asn	Lys	Ile	Glu	Asp	Leu	Arg
			340					345					350		
Ser	Glu	Cys	Ser	Ser	Asp	Phe	Gly	Gly	Lys	Asp	Ser	Val	Thr	Ser	Pro
	355						360					365			
Asp	Met	Asp	Glu	Ile	Thr	His	Gly	Ala	His	Gln	Leu	Thr	Ser	Pro	Pro
	370					375					380				
Ser	Gln	Ser	Glu	Ser	Leu	Leu	Ala	Met	Phe	Asp	Pro	Leu	Ser	Ser	His
385					390					395					400
Glu	Gly	Ala	Ser	Ala	Val	Val	Arg	Pro	Lys	Val	His	Tyr	Ala	Arg	Pro
				405					410					415	
Ser	His	Pro	Pro	Pro	Asp	Pro	Pro	Ile	Leu	Glu	Gly	Ala	Val	Gly	Gly
			420					425					430		
Asn	Glu	Ala	Arg	Leu	Pro	Asn	Phe	Gly	Ser	His	Val	Leu	Thr	Pro	Ala
	435						440					445			
Glu	Met	Glu	Ala	Phe	Lys	Gln	Arg	His	Ser	Tyr	Pro	Glu	Arg	Leu	Val
	450					455					460				
Arg	Ser	Arg	Ser	Ser	Asp	Ile	Val	Ser	Ser	Val	Arg	Arg	Pro	Met	Ser
465					470					475					480
Asp	Pro	Ser	Trp	Asn	Arg	Arg	Pro	Gly	Asn	Glu	Glu	Arg	Glu	Leu	Pro
				485					490					495	
Pro	Ala	Ala	Ala	Ile	Gly	Ala	Thr	Ser	Leu	Val	Ala	Ala	Pro	His	Ser
			500					505					510		
Ser	Ser	Ser	Ser	Pro	Ser	Lys	Asp	Ser	Ser	Arg	Gly	Glu	Thr	Glu	Glu
	515						520					525			
Arg	Lys	Asp	Ser	Asp	Asp	Glu	Lys	Ser	Asp	Arg	Asn	Arg	Pro	Trp	Trp
	530					535					540				
Arg	Lys	Arg	Phe	Val	Ser	Ala	Met	Pro	Lys	Ala	Pro	Ile	Pro	Phe	Arg
545					550					555					560
Lys	Lys	Glu	Lys	Gln	Glu	Lys	Asp	Lys	Asp	Asp	Leu	Gly	Pro	Asp	Arg
				565					570					575	
Phe	Ser	Thr	Leu	Thr	Asp	Asp	Pro	Ser	Pro	Arg	Leu	Ser	Ala	Gln	Ala
			580					585					590		
Gln	Val	Ala	Glu	Asp	Ile	Leu	Asp	Lys	Tyr	Arg	Asn	Ala	Ile	Lys	Arg
	595						600					605			
Thr	Ser	Pro	Ser	Asp	Gly	Ala	Met	Ala	Asn	Tyr	Glu	Ser	Thr	Glu	Val
	610					615					620				
Met	Gly	Asp	Gly	Glu	Ser	Ala	His	Asp	Ser	Pro	Arg	Asp	Glu	Ala	Leu
625					630					635					640

Gln Asn Ile Ser Ala Asp Asp Leu Pro Asp Ser Ala Ser Gln Ala Ala
 645 650 655
 His Pro Gln Asp Ser Ala Phe Ser Tyr Arg Asp Ala Lys Lys Lys Leu
 660 665 670
 Arg Leu Ala Leu Cys Ser Ala Asp Ser Val Ala Phe Pro Val Leu Thr
 675 680 685
 His Ser Thr Arg Asn Gly Leu Pro Asp His Thr Asp Pro Glu Asp Asn
 690 695 700
 Glu Ile Val Cys Phe Leu Lys Val Gln Ile Ala Glu Ala Ile Asn Leu
 705 710 715 720
 Gln Asp Lys Asn Leu Met Ala Gln Leu Gln Glu Thr Met Arg Cys Val
 725 730 735
 Cys Arg Phe Asp Asn Arg Thr Cys Arg Lys Leu Leu Ala Ser Ile Ala
 740 745 750
 Glu Asp Tyr Arg Lys Arg Ala Pro Tyr Ile Ala Tyr Leu Thr Arg Cys
 755 760 765
 Arg Gln Gly Leu Gln Thr Thr Gln Ala His Leu Glu Arg Leu Leu Gln
 770 775 780
 Arg Val Leu Arg Asp Lys Glu Val Ala Asn Arg Tyr Phe Thr Thr Val
 785 790 795 800
 Cys Val Arg Leu Leu Leu Glu Ser Lys Glu Lys Lys Ile Arg Glu Phe
 805 810 815
 Ile Gln Asp Phe Gln Lys Leu Thr Ala Ala Asp Asp Lys Thr Ala Gln
 820 825 830
 Val Glu Asp Phe Leu Gln Phe Leu Tyr Gly Ala Met Ala Gln Asp Val
 835 840 845
 Ile Trp Gln Asn Ala Ser Glu Glu Gln Leu Gln Asp Ala Gln Leu Ala
 850 855 860
 Ile Glu Arg Ser Val Met Asn Arg Ile Phe Lys Leu Ala Phe Tyr Pro
 865 870 875 880
 Asn Gln Asp Gly Asp Ile Leu Arg Asp Gln Val Leu His Glu His Ile
 885 890 895
 Gln Arg Leu Ser Lys Val Val Thr Ala Asn His Arg Ala Leu Gln Ile
 900 905 910
 Pro Glu Val Tyr Leu Arg Glu Ala Pro Trp Pro Ser Ala Gln Ser Glu
 915 920 925
 Ile Arg Thr Ile Ser Ala Tyr Lys Thr Pro Arg Asp Lys Val Gln Cys
 930 935 940
 Ile Leu Arg Met Cys Ser Thr Ile Met Asn Leu Leu Ser Leu Ala Asn
 945 950 955 960
 Glu Asp Ser Val Pro Gly Ala Asp Asp Phe Val Pro Val Leu Val Phe
 965 970 975
 Val Leu Ile Lys Ala Asn Pro Pro Cys Leu Leu Ser Thr Val Gln Tyr
 980 985 990
 Ile Ser Ser Phe Tyr Ala Ser Cys Leu Ser Gly Glu Glu Ser Tyr Trp
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 Trp Met Gln Phe Thr Ala Ala Val Glu Phe Ile Lys Thr Ile Asp Asp
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 Arg Lys *
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<210> 1762
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 <212> PRT
 <213> Homo sapiens

<400> 1762
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 Lys Ser Ser Ser Leu Glu Met Thr Pro Tyr Asn Thr Pro Gln Leu Ser
 20 25 30

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Arg	Ser	Arg	Ser	Arg	Thr	Asn	Met	Leu	Met	Asp	Leu	His	Met	Asp	His
	50					55					60				
Glu	Gly	Ser	Ser	Gln	Glu	Thr	Ile	Gln	Glu	Val	Gln	Pro	Glu	Glu	Val
	65				70					75					80
Leu	Val	Ile	Ser	Leu	Gly	Thr	Gly	Pro	Gln	Leu	Thr	Pro	Gly	Met	Met
				85					90					95	
Ser	Glu	Asn	Glu	Val	Leu	Asn	Met	Gln	Leu	Ser	Asp	Gly	Gly	Gln	Gly
			100					105					110		
Asp	Val	Pro	Val	Asp	Glu	Asn	Lys	Leu	His	Gly	Lys	Pro	Asp	Lys	Thr
		115					120					125			
Leu	Arg	Phe	Ser	Leu	Cys	Ser	Asp	Asn	Leu	Glu	Gly	Ile	Ser	Glu	Gly
	130					135					140				
Pro	Ser	Asn	Arg	Ser	Asn	Ser	Val	Ser	Ser	Leu	Asp	Leu	Glu	Gly	Glu
	145				150					155					160
Ser	Val	Ser	Glu	Leu	Gly	Ala	Gly	Pro	Ser	Gly	Ser	Asn	Gly	Val	Glu
				165					170					175	
Ala	Leu	Gln	Leu	Leu	Glu	His	Glu	Gln	Ala	Thr	Thr	Gln	Asp	Asn	Leu
			180					185					190		
Asp	Asp	Lys	Leu	Arg	Lys	Phe	Glu	Ile	Arg	Asp	Met	Met	Gly	Leu	Thr
		195					200					205			
Asp	Asp	Arg	Asp	Ile	Ser	Glu	Thr	Val	Ser	Glu	Thr	Trp	Ser	Thr	Asp
	210					215					220				
Val	Leu	Gly	Ser	Asp	Phe	Asp	Pro	Asn	Ile	Asp	Glu	Asp	Arg	Leu	Gln
	225				230					235					240
Glu	Ile	Ala	Gly	Ala	Ala	Ala	Glu	Asn	Met	Leu	Gly	Ser	Leu	Leu	Cys
				245					250					255	
Leu	Pro	Gly	Ser	Gly	Ser	Val	Leu	Leu	Asp	Pro	Cys	Thr	Gly	Ser	Thr
			260					265					270		
Ile	Ser	Glu	Thr	Thr	Ser	Glu	Ala	Trp	Ser	Val	Glu	Val	Leu	Pro	Ser
		275					280					285			
Asp	Ser	Glu	Ala	Pro	Asp	Leu	Lys	Gln	Glu	Glu	Arg	Leu	Gln	Glu	Leu
	290					295					300				
Glu	Ser	Cys	Ser	Gly	Leu	Gly	Ser	Thr	Ser	Asp	Asp	Thr	Asp	Val	Arg
	305				310					315					320
Glu	Val	Ser	Ser	Arg	Pro	Ser	Thr	Pro	Gly	Leu	Ser	Val	Val	Ser	Gly
				325					330					335	
Ile	Ser	Ala	Thr	Ser	Glu	Asp	Ile	Pro	Asn	Lys	Ile	Glu	Asp	Leu	Arg
			340					345					350		
Ser	Glu	Cys	Ser	Ser	Asp	Phe	Gly	Gly	Lys	Asp	Ser	Val	Thr	Ser	Pro
		355					360					365			
Asp	Met	Asp	Glu	Ile	Thr	His	Asp	Phe	Leu	Tyr	Ile	Leu	Gln	Pro	Lys
	370					375					380				
Gln	His	Phe	Gln	His	Ile	Glu	Ala	Glu	Ala	Asp	Met	Arg	Ile	Gln	Leu
	385				390					395					400
Ser	Ser	Ser	Ala	His	Gln	Leu	Thr	Ser	Pro	Pro	Ser	Gln	Ser	Glu	Ser
				405					410					415	
Leu	Leu	Ala	Met	Phe	Asp	Pro	Leu	Ser	Ser	His	Glu	Gly	Ala	Ser	Ala
			420					425					430		
Val	Val	Arg	Pro	Lys	Val	His	Tyr	Ala	Arg	Pro	Ser	His	Pro	Pro	Pro
		435					440					445			
Asp	Pro	Pro	Ile	Leu	Glu	Gly	Ala	Val	Gly	Gly	Asn	Glu	Ala	Arg	Leu
	450					455					460				
Pro	Asn	Phe	Gly	Ser	His	Val	Leu	Thr	Pro	Ala	Glu	Met	Glu	Ala	Phe
	465				470					475					480
Lys	Gln	Arg	His	Ser	Tyr	Pro	Glu	Arg	Leu	Val	Arg	Ser	Arg	Ser	Ser
				485					490					495	
Asp	Ile	Val	Ser	Ser	Val	Arg	Arg	Pro	Met	Ser	Asp	Pro	Ser	Trp	Asn
			500					505					510		
Arg	Arg	Pro	Gly	Asn	Glu	Glu	Arg	Glu	Leu	Pro	Pro	Ala	Ala	Ala	Ile
		515					520					525			
Gly	Ala	Thr	Ser	Leu	Val	Ala	Ala	Pro	His	Ser	Ser	Ser	Ser	Ser	Pro
	530					535					540				

Ser	Lys	Asp	Ser	Ser	Arg	Gly	Glu	Thr	Glu	Glu	Arg	Lys	Asp	Ser	Asp
545					550					555					560
Asp	Glu	Lys	Ser	Asp	Arg	Asn	Arg	Pro	Trp	Trp	Arg	Lys	Arg	Phe	Val
				565					570						575
Ser	Ala	Met	Pro	Lys	Asp	Asp	Pro	Ser	Pro	Arg	Leu	Ser	Ala	Gln	Ala
			580					585							590
Gln	Val	Ala	Glu	Asp	Ile	Leu	Asp	Lys	Tyr	Arg	Asn	Ala	Ile	Lys	Arg
		595					600					605			
Thr	Ser	Pro	Ser	Asp	Gly	Ala	Met	Ala	Asn	Tyr	Glu	Ser	Thr	Glu	Val
	610					615					620				
Met	Gly	Asp	Gly	Glu	Ser	Ala	His	Asp	Ser	Pro	Arg	Asp	Glu	Ala	Leu
625					630					635					640
Gln	Asn	Ile	Ser	Ala	Asp	Asp	Leu	Pro	Asp	Ser	Ala	Ser	Gln	Ala	Ala
				645					650						655
His	Pro	Gln	Asp	Ser	Ala	Phe	Ser	Tyr	Arg	Asp	Ala	Lys	Lys	Lys	Leu
			660					665							670
Arg	Leu	Ala	Leu	Cys	Ser	Ala	Asp	Ser	Val	Ala	Phe	Pro	Val	Leu	Thr
		675					680					685			
His	Ser	Thr	Arg	Asn	Gly	Leu	Pro	Asp	His	Thr	Asp	Pro	Glu	Asp	Asn
	690					695					700				
Glu	Ile	Val	Cys	Phe	Leu	Lys	Val	Gln	Ile	Ala	Glu	Ala	Ile	Asn	Leu
705						710				715					720
Gln	Asp	Lys	Asn	Leu	Met	Ala	Gln	Leu	Gln	Glu	Thr	Met	Arg	Cys	Val
				725					730						735
Cys	Arg	Phe	Asp	Asn	Arg	Thr	Cys	Arg	Lys	Leu	Leu	Ala	Ser	Ile	Ala
			740					745					750		
Glu	Asp	Tyr	Arg	Lys	Arg	Ala	Pro	Tyr	Ile	Ala	Tyr	Leu	Thr	Arg	Cys
	755						760					765			
Arg	Gln	Gly	Leu	Gln	Thr	Thr	Gln	Ala	His	Leu	Glu	Arg	Leu	Leu	Gln
	770					775					780				
Arg	Val	Leu	Arg	Asp	Lys	Glu	Val	Ala	Asn	Arg	Tyr	Phe	Thr	Thr	Val
785					790					795					800
Cys	Val	Arg	Leu	Leu	Leu	Glu	Ser	Lys	Glu	Lys	Lys	Ile	Arg	Glu	Phe
				805					810					815	
Ile	Gln	Asp	Phe	Gln	Lys	Leu	Thr	Ala	Ala	Asp	Asp	Lys	Thr	Ala	Gln
			820					825					830		
Val	Glu	Asp	Phe	Leu	Gln	Phe	Leu	Tyr	Gly	Ala	Met	Ala	Gln	Asp	Val
	835						840					845			
Ile	Trp	Gln	Asn	Ala	Ser	Glu	Glu	Gln	Leu	Gln	Asp	Ala	Gln	Leu	Ala
	850					855					860				
Ile	Glu	Arg	Ser	Val	Met	Asn	Arg	Ile	Phe	Lys	Leu	Ala	Phe	Tyr	Pro
865					870					875					880
Asn	Gln	Asp	Gly	Asp	Ile	Leu	Arg	Asp	Gln	Val	Leu	His	Glu	His	Ile
				885					890					895	
Gln	Arg	Leu	Ser	Lys	Val	Val	Thr	Ala	Asn	His	Arg	Ala	Leu	Gln	Ile
			900					905						910	
Pro	Glu	Val	Tyr	Leu	Arg	Glu	Ala	Pro	Trp	Pro	Ser	Ala	Gln	Ser	Glu
	915						920					925			
Ile	Arg	Thr	Ile	Ser	Ala	Tyr	Lys	Thr	Pro	Arg	Asp	Lys	Val	Gln	Cys
	930					935					940				
Ile	Leu	Arg	Met	Cys	Ser	Thr	Ile	Met	Asn	Leu	Leu	Ser	Leu	Ala	Asn
945					950					955					960
Glu	Asp	Ser	Val	Pro	Gly	Ala	Asp	Asp	Phe	Val	Pro	Val	Leu	Val	Phe
				965					970					975	
Val	Leu	Ile	Lys	Ala	Asn	Pro	Pro	Cys	Leu	Leu	Ser	Thr	Val	Gln	Tyr
			980					985						990	
Ile	Ser	Ser	Phe	Tyr	Ala	Ser	Cys	Leu	Ser	Gly	Glu	Glu	Ser	Tyr	Trp
	995					1000					1005				
Trp	Met	Gln	Phe	Thr	Ala	Ala	Val	Glu	Phe	Ile	Lys	Thr	Ile	Asp	Asp
	1010					1015					1020				
Arg	Lys	*													
1025	1026														

<210> 1763
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 <212> PRT
 <213> Homo sapiens

<400> 1763
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 Phe Glu Asp Pro Leu Leu Leu Pro Cys Ala His Ser Leu Cys Phe Ser
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 Cys Ala His Arg Ile Leu Val Ser Ser Cys Ser Ser Gly Glu Ser Ile
 35 40 45
 Glu Pro Ile Thr Ala Phe Gln Cys Pro Thr Cys Arg Tyr Val Ile Ser
 50 55 60
 Leu Asn His Arg Gly Leu Asp Gly Leu Lys Arg Asn Val Thr Leu Gln
 65 70 75 80
 Asn Ile Ile Asp Arg Phe Gln Lys Ala Ser Val Ser Gly Pro Asn Ser
 85 90 95
 Pro Ser Glu Ser Arg Arg Glu Arg Thr Tyr Arg Pro Thr Thr Ala Met
 100 105 110
 Ser Ser Glu Arg Ile Ala Cys Gln Phe Cys Glu Gln Asp Pro Pro Arg
 115 120 125
 Asp Ala Val Lys Thr Cys Ile Thr Cys Glu Val Ser Tyr Cys Asp Arg
 130 135 140
 Cys Leu Arg Ala Thr His Pro Asn Lys Lys Pro Phe Thr Ser His Arg
 145 150 155 160
 Leu Val Glu Pro Val Pro Asp Thr His Leu Arg Gly Ile Thr Cys Leu
 165 170 175
 Asp His Glu Asn Glu Lys Val Asn Met Tyr Cys Val Ser Asp Asp Gln
 180 185 190
 Leu Ile Cys Ala Leu Cys Lys Leu Val Gly Arg His Arg Asp His Gln
 195 200 205
 Val Ala Ser Leu Asn Asp Arg Phe Glu Lys Leu Lys Gln Thr Leu Glu
 210 215 220
 Met Asn Leu Thr Asn Leu Val Lys Arg Asn Ser Glu Leu Glu Asn Gln
 225 230 235 240
 Met Ala Lys Leu Ile Gln Ile Cys Gln Gln Val Glu Val Asn Thr Ala
 245 250 255
 Met His Glu Ala Lys Leu Met Glu Glu Cys Asp Glu Leu Val Glu Ile
 260 265 270
 Ile Gln Gln Arg Lys Gln Met Ile Ala Val Lys Ile Lys Glu Thr Lys
 275 280 285
 Val Met Lys Leu Arg Lys Leu Ala Gln Gln Val Ala Asn Cys Arg Gln
 290 295 300
 Cys Leu Glu Arg Ser Thr Val Leu Ile Asn Gln Ala Glu His Ile Leu
 305 310 315 320
 Lys Glu Asn Asp Gln Ala Arg Phe Leu Gln Ser Ala Lys Asn Ile Ala
 325 330 335
 Glu Arg Val Ala Met Ala Thr Ala Ser Ser Gln Val Leu Ile Pro Asp
 340 345 350
 Ile Asn Phe Asn Asp Ala Phe Glu Asn Phe Ala Leu Asp Phe Ser Arg
 355 360 365
 Glu Lys Lys Leu Leu Glu Gly Leu Asp Tyr Leu Thr Ala Pro Asn Pro
 370 375 380
 Pro Ser Ile Arg Glu Glu Leu Cys Thr Ala Ser His Asp Thr Ile Thr
 385 390 395 400
 Val His Trp Ile Ser Asp Asp Glu Phe Ser Ile Ser Ser Tyr Glu Leu
 405 410 415
 Gln Tyr Thr Ile Phe Thr Gly Gln Ala Asn Phe Ile Ser Leu Tyr Asn
 420 425 430
 Ser Val Asp Ser Trp Met Ile Val Pro Asn Ile Lys Gln Asn His Tyr
 435 440 445

Thr	Val	His	Gly	Leu	Gln	Ser	Gly	Thr	Arg	Tyr	Ile	Phe	Ile	Val	Lys
450						455					460				
Ala	Ile	Asn	Gln	Ala	Gly	Ser	Arg	Asn	Ser	Glu	Pro	Thr	Arg	Leu	Lys
465					470					475					480
Thr	Asn	Ser	Gln	Pro	Phe	Lys	Leu	Asp	Pro	Lys	Met	Thr	His	Lys	Lys
				485					490					495	
Leu	Lys	Ile	Ser	Asn	Asp	Gly	Leu	Gln	Met	Glu	Lys	Asp	Glu	Ser	Ser
			500					505					510		
Leu	Lys	Lys	Ser	His	Thr	Pro	Glu	Arg	Phe	Ser	Gly	Thr	Gly	Cys	Tyr
		515					520					525			
Gly	Ala	Ala	Gly	Asn	Ile	Phe	Ile	Asp	Ser	Gly	Cys	His	Tyr	Trp	Glu
	530					535					540				
Val	Val	Met	Gly	Ser	Ser	Thr	Trp	Tyr	Ala	Ile	Gly	Ile	Ala	Tyr	Lys
545					550					555					560
Ser	Ala	Pro	Lys	Asn	Glu	Trp	Ile	Gly	Lys	Asn	Ala	Ser	Ser	Trp	Val
				565					570					575	
Phe	Ser	Arg	Cys	Asn	Ser	Asn	Phe	Val	Val	Arg	His	Asn	Asn	Lys	Glu
			580					585					590		
Met	Leu	Val	Asp	Val	Pro	Pro	His	Leu	Lys	Arg	Leu	Gly	Val	Leu	Leu
	595						600					605			
Asp	Tyr	Asp	Asn	Asn	Met	Leu	Ser	Phe	Tyr	Asp	Pro	Ala	Asn	Ser	Leu
	610					615					620				
His	Leu	His	Thr	Phe	Asp	Val	Thr	Phe	Ile	Leu	Pro	Val	Cys	Pro	Thr
625					630					635					640
Phe	Thr	Ile	Trp	Asn	Lys	Ser	Leu	Met	Ile	Leu	Ser	Gly	Leu	Pro	Ala
				645					650					655	
Pro	Asp	Phe	Ile	Asp	Tyr	Pro	Glu	Arg	Gln	Glu	Cys	Asn	Cys	Arg	Pro
			660					665					670		
Gln	Glu	Ser	Pro	Tyr	Val	Ser	Gly	Met	Lys	Thr	Cys	His	*		
	675						680					685			

<210> 1764

<211> 839

<212> PRT

<213> Homo sapiens

<400> 1764

Met	Thr	Gly	Ala	Glu	Ile	Glu	Pro	Ser	Ala	Gln	Ala	Lys	Pro	Glu	Lys
1				5					10					15	
Lys	Ala	Gly	Glu	Glu	Val	Ile	Ala	Gly	Pro	Glu	Arg	Glu	Asn	Asp	Val
			20					25					30		
Pro	Leu	Val	Val	Arg	Pro	Lys	Val	Arg	Thr	Gln	Ala	Thr	Thr	Gly	Ala
		35					40					45			
Arg	Pro	Lys	Thr	Glu	Thr	Lys	Ser	Val	Pro	Ala	Ala	Arg	Pro	Lys	Thr
	50					55					60				
Glu	Ala	Gln	Ala	Met	Ser	Gly	Ala	Arg	Pro	Lys	Thr	Glu	Val	Gln	Val
65					70					75					80
Met	Gly	Gly	Ala	Arg	Pro	Lys	Thr	Glu	Ala	Gln	Gly	Ile	Thr	Gly	Ala
				85					90					95	
Arg	Pro	Lys	Thr	Asp	Ala	Arg	Ala	Val	Gly	Gly	Ala	Arg	Ser	Lys	Thr
			100					105					110		
Asp	Ala	Lys	Ala	Ile	Pro	Gly	Ala	Arg	Pro	Lys	Asp	Glu	Ala	Gln	Ala
		115					120					125			
Trp	Ala	Gln	Ser	Glu	Phe	Gly	Thr	Glu	Ala	Val	Ser	Gln	Ala	Glu	Gly
	130					135					140				
Val	Ser	Gln	Thr	Asn	Ala	Val	Ala	Trp	Pro	Leu	Ala	Thr	Ala	Glu	Ser
145					150					155					160
Gly	Ser	Val	Thr	Lys	Ser	Lys	Gly	Leu	Ser	Met	Asp	Arg	Glu	Leu	Val
				165					170					175	
Asn	Val	Asp	Ala	Glu	Thr	Phe	Pro	Gly	Thr	Gln	Gly	Gln	Lys	Gly	Ile
			180					185						190	

Gln	Pro	Trp	Phe	Gly	Pro	Gly	Glu	Glu	Thr	Asn	Met	Gly	Ser	Trp	Cys
		195					200					205			
Tyr	Ser	Arg	Pro	Arg	Ala	Arg	Glu	Glu	Ala	Ser	Asn	Glu	Ser	Gly	Phe
		210				215					220				
Trp	Ser	Ala	Asp	Glu	Thr	Ser	Thr	Ala	Ser	Ser	Phe	Trp	Thr	Gly	Glu
225					230					235					240
Glu	Thr	Ser	Val	Arg	Ser	Trp	Pro	Arg	Glu	Glu	Ser	Asn	Thr	Arg	Ser
			245						250					255	
Arg	His	Arg	Ala	Lys	His	Gln	Thr	Asn	Pro	Arg	Ser	Arg	Pro	Arg	Ser
			260					265					270		
Lys	Gln	Glu	Ala	Tyr	Val	Asp	Ser	Trp	Ser	Gly	Ser	Glu	Asp	Glu	Ala
		275						280				285			
Ser	Asn	Pro	Phe	Ser	Phe	Trp	Val	Gly	Glu	Asn	Thr	Asn	Asn	Leu	Phe
		290				295					300				
Arg	Pro	Arg	Val	Arg	Glu	Glu	Ala	Asn	Ile	Arg	Ser	Lys	Leu	Arg	Thr
305					310					315					320
Asn	Arg	Glu	Asp	Cys	Phe	Glu	Ser	Glu	Ser	Glu	Asp	Glu	Phe	Tyr	Lys
			325						330					335	
Gln	Ser	Trp	Val	Leu	Pro	Gly	Glu	Glu	Ala	Asn	Ser	Arg	Phe	Arg	His
			340					345					350		
Arg	Asp	Lys	Glu	Asp	Pro	Asn	Thr	Ala	Leu	Lys	Leu	Arg	Ala	Gln	Lys
		355					360					365			
Asp	Val	Asp	Ser	Asp	Arg	Val	Lys	Gln	Glu	Pro	Arg	Phe	Glu	Glu	Glu
		370				375					380				
Val	Ile	Ile	Gly	Ser	Trp	Phe	Trp	Ala	Glu	Lys	Glu	Ala	Ser	Leu	Glu
385					390					395					400
Gly	Gly	Ala	Ser	Ala	Ile	Cys	Glu	Ser	Glu	Pro	Gly	Thr	Glu	Glu	Gly
			405						410					415	
Ala	Ile	Gly	Gly	Ser	Ala	Tyr	Trp	Ala	Glu	Glu	Lys	Ser	Ser	Leu	Gly
			420					425					430		
Ala	Val	Ala	Arg	Glu	Glu	Ala	Lys	Pro	Glu	Ser	Glu	Glu	Glu	Ala	Ile
		435					440					445			
Phe	Gly	Ser	Trp	Phe	Trp	Asp	Arg	Asp	Glu	Ala	Cys	Phe	Asp	Leu	Asn
		450				455					460				
Pro	Cys	Pro	Val	Tyr	Lys	Val	Ser	Asp	Arg	Phe	Arg	Asp	Ala	Ala	Glu
465					470					475					480
Glu	Leu	Asn	Ala	Ser	Ser	Arg	Pro	Gln	Thr	Trp	Asp	Glu	Val	Thr	Val
			485						490					495	
Glu	Phe	Lys	Pro	Gly	Leu	Phe	His	Gly	Val	Gly	Phe	Arg	Ser	Thr	Ser
			500					505					510		
Pro	Phe	Gly	Ile	Pro	Glu	Glu	Ala	Ser	Glu	Met	Leu	Glu	Ala	Lys	Pro
		515					520					525			
Lys	Asn	Leu	Glu	Leu	Ser	Pro	Glu	Gly	Glu	Glu	Gln	Glu	Ser	Leu	Leu
		530				535						540			
Gln	Pro	Asp	Gln	Pro	Ser	Pro	Glu	Phe	Thr	Phe	Gln	Tyr	Asp	Pro	Ser
545					550					555					560
Tyr	Arg	Ser	Val	Arg	Glu	Ile	Arg	Glu	His	Leu	Arg	Ala	Arg	Glu	Ser
			565						570					575	
Ala	Glu	Ser	Glu	Ser	Trp	Ser	Cys	Ser	Cys	Ile	Gln	Cys	Glu	Leu	Lys
			580					585					590		
Ile	Gly	Ser	Glu	Glu	Phe	Glu	Glu	Phe	Leu	Leu	Leu	Met	Asp	Lys	Ile
		595					600					605			
Arg	Asp	Pro	Phe	Ile	His	Glu	Ile	Ser	Lys	Ile	Ala	Met	Gly	Met	Arg
		610				615					620				
Ser	Ala	Ser	Gln	Phe	Thr	Arg	Asp	Phe	Ile	Arg	Asp	Ser	Gly	Val	Val
625					630					635					640
Ser	Leu	Ile	Glu	Thr	Leu	Leu	Asn	Tyr	Pro	Ser	Ser	Arg	Val	Arg	Thr
			645						650					655	
Ser	Phe	Leu	Glu	Asn	Met	Ile	His	Met	Ala	Pro	Pro	Tyr	Pro	Asn	Leu
			660					665					670		
Asn	Met	Ile	Glu	Thr	Phe	Ile	Cys	Gln	Val	Cys	Glu	Glu	Thr	Leu	Ala
		675					680					685			
His	Ser	Val	Asp	Ser	Leu	Glu	Gln	Leu	Thr	Gly	Ile	Arg	Met	Leu	Arg
		690				695					700				

His Leu Thr Met Thr Ile Asp Tyr His Thr Leu Ile Ala Asn Tyr Met
 705 710 715 720
 Ser Gly Phe Leu Ser Leu Leu Thr Thr Ala Asn Ala Arg Thr Lys Phe
 725 730 735
 His Val Leu Lys Met Leu Leu Asn Leu Ser Glu Asn Pro Ala Val Ala
 740 745 750
 Lys Lys Leu Phe Ser Ala Lys Ala Leu Ser Ile Phe Val Gly Leu Phe
 755 760 765
 Asn Ile Glu Glu Thr Asn Asp Asn Ile Gln Ile Val Ile Lys Met Phe
 770 775 780
 Gln Asn Ile Ser Asn Ile Ile Lys Ser Gly Lys Met Ser Leu Ile Asp
 785 790 795 800
 Asp Asp Phe Ser Leu Glu Pro Leu Ile Ser Ala Phe Arg Glu Phe Glu
 805 810 815
 Glu Leu Ala Lys Gln Leu Gln Ala Gln Ile Asp Asn Gln Asn Asp Pro
 820 825 830
 Glu Val Gly Gln Gln Ser *
 835 838

<210> 1765
 <211> 1022
 <212> PRT
 <213> Homo sapiens

<400> 1765
 Met Asp Leu Leu Ser Gly Thr Tyr Ile Phe Ala Val Leu Leu Ala Cys
 1 5 10 15
 Val Val Phe His Ser Gly Ala Gln Glu Lys Asn Tyr Thr Ile Arg Glu
 20 25 30
 Glu Met Pro Glu Asn Val Leu Ile Gly Asp Leu Leu Lys Asp Leu Asn
 35 40 45
 Leu Ser Leu Ile Pro Asn Lys Ser Leu Thr Thr Ala Met Gln Phe Lys
 50 55 60
 Leu Val Tyr Lys Thr Gly Asp Val Pro Leu Ile Arg Ile Glu Glu Asp
 65 70 75 80
 Thr Gly Glu Ile Phe Thr Thr Gly Ala Arg Ile Asp Arg Glu Lys Leu
 85 90 95
 Cys Ala Gly Ile Pro Arg Asp Glu His Cys Phe Tyr Glu Val Glu Val
 100 105 110
 Ala Ile Leu Pro Asp Glu Ile Phe Arg Leu Val Lys Ile Arg Phe Leu
 115 120 125
 Ile Glu Asp Ile Asn Asp Asn Ala Pro Leu Phe Pro Ala Thr Val Ile
 130 135 140
 Asn Ile Ser Ile Pro Glu Asn Ser Ala Ile Asn Ser Lys Tyr Thr Leu
 145 150 155 160
 Pro Ala Ala Val Asp Pro Asp Val Gly Ile Asn Gly Val Gln Asn Tyr
 165 170 175
 Glu Leu Ile Lys Ser Gln Asn Ile Phe Gly Leu Asp Val Ile Glu Thr
 180 185 190
 Pro Glu Gly Asp Lys Met Pro Gln Leu Ile Val Gln Lys Glu Leu Asp
 195 200 205
 Arg Glu Glu Lys Asp Thr Tyr Val Met Lys Val Lys Val Glu Asp Gly
 210 215 220
 Gly Phe Pro Gln Arg Ser Ser Thr Ala Ile Leu Gln Val Ser Val Thr
 225 230 235 240
 Asp Thr Asn Asp Asn His Pro Val Phe Lys Glu Thr Glu Ile Glu Val
 245 250 255
 Ser Ile Pro Glu Asn Ala Pro Val Gly Thr Ser Val Thr Gln Leu His
 260 265 270
 Ala Thr Asp Ala Asp Ile Gly Glu Asn Ala Lys Ile His Phe Ser Phe
 275 280 285

Ser	Asn	Leu	Val	Ser	Asn	Ile	Ala	Arg	Arg	Leu	Phe	His	Leu	Asn	Ala
290						295					300				
Thr	Thr	Gly	Leu	Ile	Thr	Ile	Lys	Glu	Pro	Leu	Asp	Arg	Glu	Glu	Thr
305					310					315					320
Pro	Asn	His	Lys	Leu	Leu	Val	Leu	Ala	Ser	Asp	Gly	Gly	Leu	Met	Pro
				325					330					335	
Ala	Arg	Ala	Met	Val	Leu	Val	Asn	Val	Thr	Asp	Val	Asn	Asp	Asn	Val
			340					345					350		
Pro	Ser	Ile	Asp	Ile	Arg	Tyr	Ile	Val	Asn	Pro	Val	Asn	Asp	Thr	Val
	355						360					365			
Val	Leu	Ser	Glu	Asn	Ile	Pro	Leu	Asn	Thr	Lys	Ile	Ala	Leu	Ile	Thr
370						375					380				
Val	Thr	Asp	Lys	Asp	Ala	Asp	His	Asn	Gly	Arg	Val	Thr	Cys	Phe	Thr
385					390					395					400
Asp	His	Glu	Ile	Pro	Phe	Arg	Leu	Arg	Pro	Val	Phe	Ser	Asn	Gln	Phe
				405					410					415	
Leu	Leu	Glu	Thr	Ala	Ala	Tyr	Leu	Asp	Tyr	Glu	Ser	Thr	Lys	Glu	Tyr
			420					425					430		
Ala	Ile	Lys	Leu	Leu	Ala	Ala	Asp	Ala	Gly	Lys	Pro	Pro	Leu	Asn	Gln
	435						440					445			
Ser	Ala	Met	Leu	Phe	Ile	Lys	Val	Lys	Asp	Glu	Asn	Asp	Asn	Ala	Pro
450						455					460				
Val	Phe	Thr	Gln	Ser	Phe	Val	Thr	Val	Ser	Ile	Pro	Glu	Asn	Asn	Ser
465					470					475					480
Pro	Gly	Ile	Gln	Leu	Thr	Lys	Val	Ser	Ala	Met	Asp	Ala	Asp	Ser	Gly
			485					490						495	
Pro	Asn	Ala	Lys	Ile	Asn	Tyr	Leu	Leu	Gly	Pro	Asp	Ala	Pro	Pro	Glu
			500					505					510		
Phe	Ser	Leu	Asp	Cys	Arg	Thr	Gly	Met	Leu	Thr	Val	Val	Lys	Lys	Leu
	515						520					525			
Asp	Arg	Glu	Lys	Glu	Asp	Lys	Tyr	Leu	Phe	Thr	Ile	Leu	Ala	Lys	Asp
530						535					540				
Asn	Gly	Val	Pro	Pro	Leu	Thr	Ser	Asn	Val	Thr	Val	Phe	Val	Ser	Ile
545					550					555					560
Ile	Asp	Gln	Asn	Asp	Asn	Ser	Pro	Val	Phe	Thr	His	Asn	Glu	Tyr	Asn
			565						570					575	
Phe	Tyr	Val	Pro	Glu	Asn	Leu	Pro	Arg	His	Gly	Thr	Val	Gly	Leu	Ile
			580					585					590		
Thr	Val	Thr	Asp	Pro	Asp	Tyr	Gly	Asp	Asn	Ser	Ala	Val	Thr	Leu	Ser
	595						600					605			
Ile	Leu	Asp	Glu	Asn	Asp	Asp	Phe	Thr	Ile	Asp	Ser	Gln	Thr	Gly	Val
610						615					620				
Ile	Arg	Pro	Asn	Ile	Ser	Phe	Asp	Arg	Glu	Lys	Gln	Glu	Ser	Tyr	Thr
625					630					635					640
Phe	Tyr	Val	Lys	Ala	Glu	Asp	Gly	Gly	Arg	Val	Ser	Arg	Ser	Ser	Ser
			645					650						655	
Ala	Lys	Val	Thr	Ile	Asn	Val	Val	Asp	Val	Asn	Asp	Asn	Lys	Pro	Val
			660					665					670		
Phe	Ile	Val	Pro	Pro	Ser	Asn	Cys	Ser	Tyr	Glu	Leu	Val	Leu	Pro	Ser
	675						680					685			
Thr	Asn	Pro	Gly	Thr	Val	Val	Phe	Gln	Val	Ile	Ala	Val	Asp	Asn	Asp
690						695					700				
Thr	Gly	Met	Asn	Ala	Glu	Val	Arg	Tyr	Ser	Ile	Val	Gly	Gly	Asn	Thr
705					710					715					720
Arg	Asp	Leu	Phe	Ala	Ile	Asp	Gln	Glu	Thr	Gly	Asn	Ile	Thr	Leu	Met
			725						730					735	
Glu	Lys	Cys	Asp	Val	Thr	Asp	Leu	Gly	Leu	His	Arg	Val	Leu	Val	Lys
			740					745					750		
Ala	Asn	Asp	Leu	Gly	Gln	Pro	Asp	Ser	Leu	Phe	Ser	Val	Val	Ile	Val
	755						760					765			
Asn	Leu	Phe	Val	Asn	Glu	Ser	Val	Thr	Asn	Ala	Thr	Leu	Ile	Asn	Glu
770						775					780				
Leu	Val	Arg	Lys	Ser	Thr	Glu	Ala	Pro	Val	Thr	Pro	Asn	Thr	Glu	Ile
785					790					795					800

Ala Asp Val Ser Ser Pro Thr Ser Asp Tyr Val Lys Ile Leu Val Ala
 805 810 815
 Ala Val Ala Gly Thr Ile Thr Val Val Val Val Ile Phe Ile Thr Ala
 820 825 830
 Val Val Arg Cys Arg Gln Ala Pro His Leu Lys Ala Ala Gln Lys Asn
 835 840 845
 Lys Gln Asn Ser Glu Trp Ala Thr Pro Asn Pro Glu Asn Arg Gln Met
 850 855 860
 Ile Met Met Lys Lys Lys Lys Lys Lys Lys Lys His Ser Pro Lys Asn
 865 870 875 880
 Leu Leu Leu Asn Phe Val Thr Ile Glu Glu Thr Lys Ala Asp Asp Val
 885 890 895
 Asp Ser Asp Gly Asn Arg Val Thr Leu Asp Leu Pro Ile Asp Leu Glu
 900 905 910
 Glu Gln Thr Met Gly Lys Tyr Asn Trp Val Thr Thr Pro Thr Thr Phe
 915 920 925
 Lys Pro Asp Ser Pro Asp Leu Ala Arg His Tyr Lys Ser Ala Ser Pro
 930 935 940
 Gln Pro Ala Phe Gln Ile Gln Pro Glu Thr Pro Leu Asn Ser Lys His
 945 950 955 960
 His Ile Ile Gln Glu Leu Pro Leu Asp Asn Thr Phe Val Ala Cys Asp
 965 970 975
 Ser Ile Ser Lys Cys Ser Ser Ser Ser Ser Asp Pro Tyr Ser Val Ser
 980 985 990
 Asp Cys Gly Tyr Pro Val Thr Thr Phe Glu Val Pro Val Ser Val His
 995 1000 1005
 Thr Arg Pro Val Gly Ile Gln Val Ser Asn Thr Thr Phe *
 1010 1015 1020 1021

<210> 1766

<211> 269

<212> PRT

<213> Homo sapiens

<400> 1766

Met Asp Phe Val Phe Ser Leu Val Asn Ser Phe Leu Gly Glu Phe Leu
 1 5 10 15
 Arg Arg Ile Ile Gly Met Gln Leu Ile Thr Ser Leu Gly Leu Gln Glu
 20 25 30
 Phe Asp Ile Ala Arg Asn Val Leu Glu Leu Ile Tyr Ala Gln Thr Leu
 35 40 45
 Val Trp Ile Gly Ile Phe Phe Cys Pro Leu Leu Pro Phe Ile Gln Met
 50 55 60
 Ile Met Leu Phe Ile Met Phe Tyr Ser Lys Asn Ile Ser Leu Met Met
 65 70 75 80
 Asn Phe Gln Pro Pro Ser Lys Ala Trp Arg Ala Ser Gln Met Met Thr
 85 90 95
 Phe Phe Ile Phe Leu Leu Phe Phe Pro Ser Phe Thr Gly Val Leu Cys
 100 105 110
 Thr Leu Ala Ile Thr Ile Trp Arg Leu Lys Pro Ser Ala Asp Cys Gly
 115 120 125
 Pro Phe Arg Gly Leu Pro Leu Phe Ile His Ser Ile Tyr Ser Trp Ile
 130 135 140
 Asp Thr Leu Ser Thr Arg Pro Gly Tyr Leu Trp Val Val Trp Ile Tyr
 145 150 155 160
 Arg Asn Leu Ile Gly Ser Val His Phe Phe Phe Ile Leu Thr Leu Ile
 165 170 175
 Val Leu Ile Ile Thr Tyr Leu Tyr Trp Gln Ile Thr Glu Gly Arg Lys
 180 185 190
 Ile Met Ile Arg Leu Leu His Glu Gln Ile Ile Asn Glu Gly Lys Asp
 195 200 205

Lys	Met	Phe	Leu	Ile	Glu	Lys	Leu	Ile	Lys	Leu	Gln	Asp	Met	Glu	Lys
210						215					220				
Lys	Ala	Asn	Pro	Ser	Ser	Leu	Val	Leu	Glu	Arg	Arg	Glu	Val	Glu	Gln
225					230					235					240
Gln	Gly	Phe	Leu	His	Leu	Gly	Glu	His	Asp	Gly	Ser	Leu	Asp	Leu	Arg
				245					250					255	
Ser	Arg	Arg	Ser	Val	Gln	Glu	Gly	Asn	Pro	Arg	Ala	*			
			260					265			268				

<210> 1767
 <211> 1025
 <212> PRT
 <213> Homo sapiens

<400> 1767

Met	Glu	Arg	Arg	Ser	Arg	Arg	Lys	Ser	Arg	Arg	Asn	Gly	Arg	Ser	Thr
1				5					10					15	
Ala	Gly	Lys	Ala	Ala	Ala	Thr	Gln	Pro	Ala	Lys	Ser	Pro	Gly	Ala	Gln
			20					25					30		
Leu	Trp	Leu	Phe	Pro	Ser	Ala	Ala	Gly	Leu	His	Arg	Ala	Leu	Leu	Arg
		35					40					45			
Arg	Val	Glu	Val	Thr	Arg	Gln	Leu	Cys	Cys	Ser	Pro	Gly	Arg	Leu	Ala
	50					55					60				
Val	Leu	Glu	Arg	Gly	Gly	Ala	Gly	Val	Gln	Val	His	Gln	Leu	Leu	Ala
65					70					75					80
Gly	Ser	Gly	Gly	Ala	Arg	Thr	Pro	Lys	Cys	Ile	Lys	Leu	Gly	Lys	Asn
				85					90					95	
Met	Lys	Ile	His	Ser	Val	Asp	Gln	Gly	Ala	Glu	His	Met	Leu	Ile	Leu
			100					105					110		
Ser	Ser	Asp	Gly	Lys	Pro	Phe	Glu	Tyr	Asp	Asn	Tyr	Ser	Met	Lys	His
		115					120					125			
Leu	Arg	Phe	Glu	Ser	Ile	Leu	Gln	Glu	Lys	Lys	Ile	Ile	Gln	Ile	Thr
	130					135						140			
Cys	Gly	Asp	Tyr	His	Ser	Leu	Ala	Leu	Ser	Lys	Gly	Gly	Glu	Leu	Phe
145					150					155					160
Ala	Trp	Gly	Gln	Asn	Leu	His	Gly	Gln	Leu	Gly	Val	Gly	Arg	Lys	Phe
				165				170						175	
Pro	Ser	Thr	Thr	Thr	Pro	Gln	Ile	Val	Glu	His	Leu	Ala	Gly	Val	Pro
			180					185					190		
Leu	Ala	Gln	Ile	Ser	Ala	Gly	Glu	Ala	His	Ser	Met	Ala	Leu	Ser	Met
		195					200					205			
Ser	Gly	Asn	Ile	Tyr	Ser	Trp	Gly	Lys	Asn	Glu	Cys	Gly	Gln	Leu	Gly
	210					215					220				
Leu	Gly	His	Thr	Glu	Ser	Lys	Asp	Asp	Pro	Ser	Leu	Ile	Glu	Gly	Leu
225					230					235					240
Asp	Asn	Gln	Lys	Val	Glu	Phe	Val	Ala	Cys	Gly	Gly	Ser	His	Ser	Ala
				245					250					255	
Leu	Leu	Thr	Gln	Asp	Gly	Leu	Leu	Phe	Thr	Phe	Gly	Ala	Gly	Lys	His
			260					265					270		
Gly	Gln	Leu	Gly	His	Asn	Ser	Thr	Gln	Asn	Glu	Leu	Arg	Pro	Cys	Leu
		275					280					285			
Val	Ala	Glu	Leu	Val	Gly	Tyr	Arg	Val	Thr	Gln	Ile	Ala	Cys	Gly	Arg
	290					295					300				
Trp	His	Thr	Leu	Ala	Tyr	Val	Ser	Asp	Leu	Gly	Lys	Val	Phe	Ser	Phe
305					310					315					320
Gly	Ser	Gly	Lys	Asp	Gly	Gln	Leu	Gly	Asn	Gly	Gly	Thr	Arg	Asp	Gln
				325					330					335	
Leu	Met	Pro	Leu	Pro	Val	Lys	Val	Ser	Ser	Ser	Glu	Glu	Leu	Lys	Leu
			340					345					350		
Glu	Ser	His	Thr	Ser	Glu	Lys	Glu	Leu	Ile	Met	Ile	Ala	Gly	Gly	Asn
			355				360					365			

Gln	Ser	Ile	Leu	Leu	Trp	Ile	Lys	Lys	Glu	Asn	Ser	Tyr	Val	Asn	Leu
370						375				380					
Lys	Arg	Thr	Ile	Pro	Thr	Leu	Asn	Glu	Gly	Thr	Val	Lys	Arg	Trp	Ile
385					390					395					400
Ala	Asp	Val	Glu	Thr	Lys	Arg	Trp	Gln	Ser	Thr	Lys	Arg	Glu	Ile	Gln
				405					410					415	
Glu	Ile	Phe	Ser	Ser	Pro	Ala	Cys	Leu	Thr	Gly	Ser	Phe	Leu	Arg	Lys
			420					425					430		
Arg	Arg	Thr	Thr	Glu	Met	Met	Pro	Val	Tyr	Leu	Asp	Leu	Asn	Lys	Ala
		435					440					445			
Arg	Asn	Ile	Phe	Arg	Glu	Leu	Thr	Gln	Lys	Asp	Trp	Ile	Thr	Asn	Met
	450					455					460				
Ile	Thr	Thr	Cys	Leu	Lys	Asp	Asn	Leu	Leu	Lys	Arg	Leu	Pro	Phe	His
465					470					475					480
Ser	Pro	Pro	Gln	Glu	Ala	Leu	Glu	Ile	Phe	Phe	Leu	Leu	Pro	Glu	Cys
				485					490					495	
Pro	Val	Met	His	Ile	Ser	Asn	Asn	Trp	Glu	Ser	Leu	Val	Val	Pro	Phe
			500					505					510		
Ala	Lys	Val	Val	Cys	Lys	Met	Ser	Asp	Gln	Ser	Ser	Leu	Val	Leu	Glu
		515					520					525			
Glu	Tyr	Trp	Ala	Thr	Leu	Gln	Glu	Ser	Thr	Phe	Ser	Lys	Leu	Val	Gln
	530					535					540				
Met	Phe	Lys	Thr	Ala	Val	Ile	Cys	Gln	Leu	Asp	Tyr	Trp	Asp	Glu	Ser
545					550					555					560
Ala	Glu	Glu	Asn	Gly	Asn	Val	Gln	Ala	Leu	Leu	Glu	Met	Leu	Lys	Lys
				565					570					575	
Leu	His	Arg	Val	Asn	Gln	Val	Lys	Cys	Gln	Leu	Pro	Glu	Ser	Ile	Phe
			580					585					590		
Gln	Val	Asp	Glu	Leu	Leu	His	Arg	Leu	Asn	Phe	Phe	Val	Glu	Val	Cys
		595					600					605			
Arg	Arg	Tyr	Leu	Trp	Lys	Met	Thr	Val	Asp	Ala	Ser	Glu	Asn	Val	Gln
	610					615					620				
Cys	Cys	Val	Ile	Phe	Ser	His	Phe	Pro	Phe	Ile	Phe	Asn	Asn	Leu	Ser
625					630					635					640
Lys	Ile	Lys	Leu	Leu	His	Thr	Asp	Thr	Leu	Leu	Lys	Ile	Glu	Ser	Lys
				645					650					655	
Lys	His	Lys	Ala	Tyr	Leu	Arg	Ser	Ala	Ala	Ile	Glu	Glu	Glu	Arg	Glu
			660					665					670		
Ser	Glu	Phe	Ala	Leu	Arg	Pro	Thr	Phe	Asp	Leu	Thr	Val	Arg	Arg	Asn
		675					680					685			
His	Leu	Ile	Glu	Asp	Val	Leu	Asn	Gln	Leu	Ser	Gln	Phe	Glu	Asn	Glu
	690					695					700				
Asp	Leu	Arg	Lys	Glu	Leu	Trp	Val	Ser	Phe	Ser	Gly	Glu	Ile	Gly	Tyr
705					710					715					720
Asp	Leu	Gly	Gly	Val	Lys	Lys	Glu	Phe	Phe	Tyr	Cys	Leu	Phe	Ala	Glu
				725					730					735	
Met	Ile	Gln	Pro	Glu	Tyr	Gly	Met	Phe	Met	Tyr	Pro	Glu	Gly	Ala	Ser
			740					745					750		
Cys	Met	Trp	Phe	Pro	Val	Lys	Pro	Lys	Phe	Glu	Lys	Lys	Arg	Tyr	Phe
		755					760					765			
Phe	Phe	Gly	Val	Leu	Cys	Gly	Leu	Ser	Leu	Phe	Asn	Cys	Asn	Val	Ala
	770					775					780				
Asn	Leu	Pro	Phe	Pro	Leu	Ala	Leu	Phe	Lys	Lys	Leu	Leu	Asp	Gln	Met
785					790					795					800
Pro	Ser	Leu	Glu	Asp	Leu	Lys	Glu	Leu	Ser	Pro	Asp	Leu	Gly	Lys	Asn
				805					810					815	
Leu	Gln	Thr	Leu	Leu	Asp	Asp	Glu	Gly	Asp	Asn	Phe	Glu	Glu	Val	Phe
			820					825					830		
Tyr	Ile	His	Phe	Asn	Val	His	Trp	Asp	Arg	Asn	Asp	Thr	Asn	Leu	Ile
		835					840					845			
Pro	Asn	Gly	Ser	Ser	Ile	Thr	Val	Asn	Gln	Thr	Asn	Lys	Arg	Asp	Tyr
	850					855					860				
Val	Ser	Lys	Tyr	Ile	Asn	Tyr	Ile	Phe	Asn	Asp	Ser	Val	Lys	Ala	Val
865					870					875					880

Tyr Glu Glu Phe Arg Arg Gly Phe Tyr Lys Met Cys Asp Glu Asp Ile
 885 890 895
 Ile Lys Leu Phe His Pro Glu Glu Leu Lys Asp Val Ile Val Gly Asn
 900 905 910
 Thr Asp Tyr Asp Trp Lys Thr Phe Glu Lys Asn Ala Arg Tyr Glu Pro
 915 920 925
 Gly Tyr Asn Ser Ser His Pro Thr Ile Val Met Phe Trp Lys Ala Phe
 930 935 940
 His Lys Leu Thr Leu Glu Glu Lys Lys Lys Phe Leu Val Phe Leu Thr
 945 950 955 960
 Gly Thr Asp Arg Leu Gln Met Lys Asp Leu Asn Asn Met Lys Ile Thr
 965 970 975
 Phe Cys Cys Pro Glu Ser Trp Asn Glu Arg Asp Pro Ile Arg Ala Leu
 980 985 990
 Thr Cys Phe Ser Val Leu Phe Leu Pro Lys Tyr Ser Thr Met Glu Thr
 995 1000 1005
 Val Glu Glu Ala Leu Gln Glu Ala Ile Asn Asn Asn Arg Gly Phe Gly
 1010 1015 1020 1024
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<210> 1768
 <211> 586
 <212> PRT
 <213> Homo sapiens

<400> 1768
 Met Ala Pro Ser Thr Pro Leu Leu Thr Val Arg Gly Ser Glu Gly Leu
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 Tyr Met Val Asn Gly Pro Pro His Phe Thr Glu Ser Thr Val Phe Pro
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 Arg Glu Ser Gly Lys Asn Cys Lys Val Cys Ile Phe Ser Lys Asp Gly
 35 40 45
 Thr Leu Phe Ala Trp Gly Asn Gly Glu Lys Val Asn Ile Ile Ser Val
 50 55 60
 Thr Asn Lys Gly Leu Leu His Ser Phe Asp Leu Leu Lys Ala Val Cys
 65 70 75 80
 Leu Glu Phe Ser Pro Lys Asn Thr Val Leu Ala Thr Trp Gln Pro Tyr
 85 90 95
 Ser Thr Ser Lys Asp Gly Thr Ala Gly Ile Pro Asn Leu Gln Leu Tyr
 100 105 110
 Asp Val Lys Thr Gly Thr Cys Leu Lys Ser Phe Ile Gln Lys Lys Met
 115 120 125
 Gln Asn Trp Cys Pro Ser Trp Ser Glu Asp Glu Thr Leu Cys Ala Arg
 130 135 140
 Asn Val Asn Asn Glu Val His Phe Phe Glu Asn Asn Asn Phe Asn Thr
 145 150 155 160
 Ile Ala Asn Lys Leu His Leu Gln Lys Ile Asn Asp Phe Val Leu Ser
 165 170 175
 Pro Gly Pro Gln Pro Tyr Lys Val Ala Val Tyr Val Pro Gly Ser Lys
 180 185 190
 Gly Ala Pro Ser Phe Val Arg Leu Tyr Gln Tyr Pro Asn Phe Ala Gly
 195 200 205
 Pro His Ala Ala Leu Ala Asn Lys Ser Phe Phe Lys Ala Asp Lys Val
 210 215 220
 Thr Met Leu Trp Asn Lys Lys Ala Thr Ala Val Leu Val Ile Ala Ser
 225 230 235 240
 Thr Asp Val Asp Lys Thr Gly Ala Ser Tyr Tyr Gly Glu Gln Thr Leu
 245 250 255
 His Tyr Ile Ala Thr Asn Gly Glu Ser Ala Val Val Gln Leu Pro Lys
 260 265 270

Asn	Gly	Pro	Ile	Tyr	Asp	Val	Val	Trp	Asn	Ser	Ser	Ser	Thr	Glu	Phe
		275					280					285			
Cys	Ala	Val	Tyr	Gly	Phe	Met	Pro	Ala	Lys	Ala	Thr	Ile	Phe	Asn	Leu
	290					295					300				
Lys	Cys	Asp	Pro	Val	Phe	Asp	Phe	Gly	Thr	Gly	Pro	Arg	Asn	Ala	Ala
305					310					315					320
Tyr	Tyr	Ser	Pro	His	Gly	His	Ile	Leu	Val	Leu	Ala	Gly	Phe	Gly	Asn
				325					330					335	
Leu	Arg	Gly	Gln	Met	Glu	Val	Trp	Asp	Val	Lys	Asn	Tyr	Lys	Leu	Ile
			340					345					350		
Ser	Lys	Pro	Val	Ala	Ser	Asp	Ser	Thr	Tyr	Phe	Ala	Trp	Cys	Pro	Asp
		355					360					365			
Gly	Glu	His	Ile	Leu	Thr	Ala	Thr	Cys	Ala	Pro	Arg	Leu	Arg	Val	Asn
	370					375					380				
Asn	Gly	Tyr	Lys	Ile	Trp	His	Tyr	Thr	Gly	Ser	Ile	Leu	His	Lys	Tyr
385					390					395					400
Asp	Val	Pro	Ser	Asn	Ala	Glu	Leu	Trp	Gln	Val	Ser	Trp	Gln	Pro	Phe
				405					410					415	
Leu	Asp	Gly	Ile	Phe	Pro	Ala	Lys	Thr	Ile	Thr	Tyr	Gln	Ala	Val	Pro
			420					425					430		
Ser	Glu	Val	Pro	Asn	Glu	Glu	Pro	Lys	Val	Ala	Thr	Ala	Tyr	Arg	Pro
		435					440					445			
Pro	Ala	Leu	Arg	Asn	Lys	Pro	Ile	Thr	Asn	Ser	Lys	Leu	His	Glu	Glu
	450					455					460				
Glu	Pro	Pro	Gln	Asn	Met	Lys	Pro	Gln	Ser	Gly	Asn	Asp	Lys	Pro	Leu
465					470					475					480
Ser	Lys	Thr	Ala	Leu	Lys	Asn	Gln	Arg	Lys	His	Glu	Ala	Lys	Lys	Ala
				485					490					495	
Ala	Lys	Gln	Glu	Ala	Arg	Ser	Asp	Lys	Ser	Pro	Asp	Leu	Ala	Pro	Thr
		500						505					510		
Pro	Ala	Pro	Gln	Ser	Thr	Pro	Arg	Asn	Thr	Val	Ser	Gln	Ser	Ile	Ser
		515					520					525			
Gly	Asp	Pro	Glu	Ile	Asp	Lys	Lys	Ile	Lys	Asn	Leu	Lys	Lys	Lys	Leu
	530					535					540				
Lys	Ala	Ile	Glu	Gln	Leu	Lys	Glu	Gln	Ala	Ala	Thr	Gly	Lys	Gln	Leu
545					550					555					560
Glu	Lys	Asn	Gln	Leu	Glu	Lys	Ile	Gln	Lys	Glu	Thr	Ala	Leu	Leu	Gln
				565					570					575	
Glu	Leu	Glu	Asp	Leu	Glu	Leu	Gly	Ile	*						
			580					585							

<210> 1769

<211> 841

<212> PRT

<213> Homo sapiens

<400> 1769

Met	Gly	Thr	Pro	Arg	Ala	Gln	His	Pro	Pro	Pro	Pro	Gln	Leu	Leu	Phe
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Leu	Ile	Leu	Leu	Ser	Cys	Pro	Trp	Ile	Gln	Gly	Leu	Pro	Leu	Lys	Glu
		20						25					30		
Glu	Glu	Ile	Leu	Pro	Glu	Pro	Gly	Ser	Glu	Thr	Pro	Thr	Val	Ala	Ser
		35					40					45			
Glu	Ala	Leu	Ala	Glu	Leu	Leu	His	Gly	Ala	Leu	Leu	Arg	Arg	Gly	Pro
	50					55					60				
Glu	Met	Gly	Tyr	Leu	Pro	Gly	Pro	Pro	Leu	Gly	Pro	Glu	Gly	Gly	Glu
65					70					75					80
Glu	Glu	Thr	Thr	Thr	Thr	Ile	Ile	Thr	Thr	Thr	Thr	Val	Thr	Thr	Thr
				85					90					95	
Val	Thr	Ser	Pro	Val	Leu	Cys	Asn	Asn	Asn	Ile	Ser	Glu	Gly	Glu	Gly
			100					105					110		

Tyr	Val	Glu	Ser	Pro	Asp	Leu	Gly	Ser	Pro	Val	Ser	Arg	Thr	Leu	Gly
	115						120					125			
Leu	Leu	Asp	Cys	Thr	Tyr	Ser	Ile	His	Val	Tyr	Pro	Gly	Tyr	Gly	Ile
	130					135					140				
Glu	Ile	Gln	Val	Gln	Thr	Leu	Asn	Leu	Ser	Gln	Glu	Glu	Glu	Leu	Leu
145					150					155					160
Val	Leu	Ala	Gly	Gly	Gly	Ser	Pro	Gly	Leu	Ala	Pro	Arg	Leu	Leu	Ala
			165						170						175
Asn	Ser	Ser	Met	Leu	Gly	Glu	Gly	Gln	Val	Leu	Arg	Ser	Pro	Thr	Asn
			180					185					190		
Arg	Leu	Leu	Leu	His	Phe	Gln	Ser	Pro	Arg	Val	Pro	Arg	Gly	Gly	Gly
	195						200					205			
Phe	Arg	Ile	His	Tyr	Gln	Ala	Tyr	Leu	Leu	Ser	Cys	Gly	Phe	Pro	Pro
	210					215					220				
Arg	Pro	Ala	His	Gly	Asp	Val	Ser	Val	Thr	Asp	Leu	His	Pro	Gly	Gly
225					230					235					240
Thr	Ala	Thr	Phe	His	Cys	Asp	Ser	Gly	Tyr	Gln	Leu	Gln	Gly	Glu	Glu
				245					250						255
Thr	Leu	Ile	Cys	Leu	Asn	Gly	Thr	Arg	Pro	Ser	Trp	Asn	Gly	Glu	Thr
			260					265					270		
Pro	Ser	Cys	Met	Ala	Ser	Cys	Gly	Gly	Thr	Ile	His	Asn	Ala	Thr	Leu
	275						280					285			
Gly	Arg	Ile	Val	Ser	Pro	Glu	Pro	Gly	Gly	Ala	Val	Gly	Pro	Asn	Leu
	290					295					300				
Thr	Cys	Arg	Trp	Val	Ile	Glu	Ala	Ala	Glu	Gly	Arg	Arg	Leu	His	Leu
305					310					315					320
His	Phe	Glu	Arg	Val	Ser	Leu	Asp	Glu	Asp	Asn	Asp	Arg	Leu	Met	Val
				325					330					335	
Arg	Ser	Gly	Gly	Ser	Pro	Leu	Ser	Pro	Val	Ile	Tyr	Asp	Ser	Asp	Met
			340					345					350		
Asp	Asp	Val	Pro	Glu	Arg	Gly	Leu	Ile	Ser	Asp	Ala	Gln	Ser	Leu	Tyr
	355					360						365			
Val	Glu	Leu	Leu	Ser	Glu	Thr	Pro	Ala	Asn	Pro	Leu	Leu	Leu	Ser	Leu
	370					375					380				
Arg	Phe	Glu	Ala	Phe	Glu	Glu	Asp	Arg	Cys	Phe	Ala	Pro	Phe	Leu	Ala
385					390					395					400
His	Gly	Asn	Val	Thr	Thr	Thr	Asp	Pro	Glu	Tyr	Arg	Pro	Gly	Ala	Leu
				405					410					415	
Ala	Thr	Phe	Ser	Cys	Leu	Pro	Gly	Tyr	Ala	Leu	Glu	Pro	Pro	Gly	Pro
			420					425					430		
Pro	Asn	Ala	Ile	Glu	Cys	Val	Asp	Pro	Thr	Glu	Pro	His	Trp	Asn	Asp
	435					440						445			
Thr	Glu	Pro	Ala	Cys	Lys	Ala	Met	Cys	Gly	Gly	Glu	Leu	Ser	Glu	Pro
	450					455					460				
Ala	Gly	Val	Val	Leu	Ser	Pro	Asp	Trp	Pro	Gln	Ser	Tyr	Ser	Pro	Gly
465					470					475					480
Gln	Asp	Cys	Val	Trp	Gly	Val	His	Val	Gln	Glu	Glu	Lys	Arg	Ile	Leu
			485					490						495	
Leu	Gln	Val	Glu	Ile	Leu	Asn	Val	Arg	Glu	Gly	Asp	Met	Leu	Thr	Leu
			500					505					510		
Phe	Asp	Gly	Asp	Gly	Pro	Ser	Ala	Arg	Val	Leu	Ala	Gln	Leu	Arg	Gly
	515						520					525			
Pro	Gln	Pro	Arg	Arg	Arg	Leu	Leu	Ser	Ser	Gly	Pro	Asp	Leu	Thr	Leu
	530					535					540				
Gln	Phe	Gln	Ala	Pro	Pro	Gly	Pro	Pro	Asn	Pro	Gly	Leu	Gly	Gln	Gly
545					550					555					560
Phe	Val	Leu	His	Phe	Lys	Glu	Val	Pro	Arg	Asn	Asp	Thr	Cys	Pro	Glu
			565					570						575	
Leu	Pro	Pro	Pro	Glu	Trp	Gly	Trp	Arg	Thr	Ala	Ser	His	Gly	Asp	Leu
			580					585					590		
Ile	Arg	Gly	Thr	Val	Leu	Thr	Tyr	Gln	Cys	Glu	Pro	Gly	Tyr	Glu	Leu
	595						600					605			
Leu	Gly	Ser	Asp	Ile	Leu	Thr	Cys	Gln	Trp	Asp	Leu	Ser	Trp	Ser	Ala
	610					615					620				

Ala Pro Pro Ala Cys Gln Lys Ile Met Thr Cys Ala Asp Pro Gly Glu
 625 630 635 640
 Ile Ala Asn Gly His Arg Thr Ala Ser Asp Ala Gly Phe Pro Val Gly
 645 650 655
 Ser His Val Gln Tyr Arg Cys Leu Pro Gly Tyr Ser Leu Glu Gly Ala
 660 665 670
 Ala Met Leu Thr Cys Tyr Ser Arg Asp Thr Gly Thr Pro Lys Trp Ser
 675 680 685
 Asp Arg Val Pro Lys Cys Ala Leu Lys Tyr Glu Pro Cys Leu Asn Pro
 690 695 700
 Gly Val Pro Glu Asn Gly Tyr Gln Thr Leu Tyr Lys His His Tyr Gln
 705 710 715 720
 Ala Gly Glu Ser Leu Arg Phe Phe Cys Tyr Glu Gly Phe Glu Leu Ile
 725 730 735
 Gly Glu Val Thr Ile Thr Cys Val Pro Gly His Pro Ser Gln Trp Thr
 740 745 750
 Ser Gln Pro Pro Leu Cys Lys Val Thr Gln Thr Thr Asp Pro Ser Arg
 755 760 765
 Gln Leu Glu Gly Gly Asn Leu Ala Leu Ala Ile Leu Leu Pro Leu Gly
 770 775 780
 Leu Val Ile Val Leu Gly Ser Gly Val Tyr Ile Tyr Tyr Thr Lys Leu
 785 790 795 800
 Gln Gly Lys Ser Leu Phe Gly Phe Ser Gly Ser His Ser Tyr Ser Pro
 805 810 815
 Ile Thr Val Glu Ser Asp Phe Ser Asn Pro Leu Tyr Glu Ala Gly Asp
 820 825 830
 Thr Arg Glu Tyr Glu Val Ser Ile *
 835 840

<210> 1770

<211> 854

<212> PRT

<213> Homo sapiens

<400> 1770

Met Gly Thr Pro Arg Ala Gln His Pro Pro Pro Pro Gln Leu Leu Phe
 1 5 10 15
 Leu Ile Leu Leu Ser Cys Pro Trp Ile Gln Gly Leu Pro Leu Lys Glu
 20 25 30
 Glu Glu Ile Leu Pro Glu Pro Gly Ser Glu Thr Pro Thr Val Ala Ser
 35 40 45
 Glu Ala Leu Ala Glu Leu Leu His Gly Ala Leu Leu Arg Arg Gly Pro
 50 55 60
 Glu Met Gly Tyr Leu Pro Gly Pro Pro Leu Gly Pro Glu Gly Gly Glu
 65 70 75 80
 Glu Glu Thr Thr Thr Thr Ile Ile Thr Thr Thr Thr Val Thr Thr Thr
 85 90 95
 Val Thr Ser Pro Val Leu Cys Asn Asn Asn Ile Ser Glu Gly Glu Gly
 100 105 110
 Tyr Val Glu Ser Pro Asp Leu Gly Ser Pro Val Ser Arg Thr Leu Gly
 115 120 125
 Leu Leu Asp Cys Thr Tyr Ser Ile His Val Tyr Pro Gly Tyr Gly Ile
 130 135 140
 Glu Ile Gln Val Gln Thr Leu Asn Leu Ser Gln Glu Glu Glu Leu Leu
 145 150 155 160
 Val Leu Ala Gly Gly Gly Ser Pro Gly Leu Ala Pro Arg Leu Leu Ala
 165 170 175
 Asn Ser Ser Met Leu Gly Glu Gly Gln Val Leu Arg Ser Pro Thr Asn
 180 185 190
 Arg Leu Leu Leu His Phe Gln Ser Pro Arg Val Pro Arg Gly Gly Gly
 195 200 205

Phe	Arg	Ile	His	Tyr	Gln	Ala	Tyr	Leu	Leu	Ser	Cys	Gly	Phe	Pro	Pro
210						215					220				
Arg	Pro	Ala	His	Gly	Asp	Val	Ser	Val	Thr	Asp	Leu	His	Pro	Gly	Gly
225					230					235					240
Thr	Ala	Thr	Phe	His	Cys	Asp	Ser	Gly	Tyr	Gln	Leu	Gln	Gly	Glu	Glu
				245					250					255	
Thr	Leu	Ile	Cys	Leu	Asn	Gly	Thr	Arg	Pro	Ser	Trp	Asn	Gly	Glu	Thr
			260				265					270			
Pro	Ser	Cys	Met	Ala	Ser	Cys	Gly	Gly	Thr	Ile	His	Asn	Ala	Thr	Leu
		275					280					285			
Gly	Arg	Ile	Val	Ser	Pro	Glu	Pro	Gly	Gly	Ala	Val	Gly	Pro	Asn	Leu
	290					295					300				
Thr	Cys	Arg	Trp	Val	Ile	Glu	Ala	Ala	Glu	Gly	Arg	Arg	Leu	His	Leu
305					310					315					320
His	Phe	Glu	Arg	Val	Ser	Leu	Asp	Glu	Asp	Asn	Asp	Arg	Leu	Met	Val
				325					330					335	
Arg	Ser	Gly	Gly	Ser	Pro	Leu	Ser	Pro	Val	Ile	Tyr	Asp	Ser	Asp	Met
		340						345					350		
Asp	Asp	Val	Pro	Glu	Arg	Gly	Leu	Ile	Ser	Asp	Ala	Gln	Ser	Leu	Tyr
	355						360					365			
Val	Glu	Leu	Leu	Ser	Glu	Thr	Pro	Ala	Asn	Pro	Leu	Leu	Leu	Ser	Leu
	370					375					380				
Arg	Phe	Glu	Ala	Phe	Glu	Glu	Asp	Arg	Cys	Phe	Ala	Pro	Phe	Leu	Ala
385					390					395					400
His	Gly	Asn	Val	Thr	Thr	Thr	Asp	Pro	Glu	Tyr	Arg	Pro	Gly	Ala	Leu
			405					410						415	
Ala	Thr	Phe	Ser	Cys	Leu	Pro	Gly	Tyr	Ala	Leu	Glu	Pro	Pro	Gly	Pro
		420						425					430		
Pro	Asn	Ala	Ile	Glu	Cys	Val	Asp	Pro	Thr	Glu	Pro	His	Trp	Asn	Asp
	435						440					445			
Thr	Glu	Pro	Ala	Cys	Lys	Ala	Met	Cys	Gly	Gly	Glu	Leu	Ser	Glu	Pro
	450					455					460				
Ala	Gly	Val	Val	Leu	Ser	Pro	Asp	Trp	Pro	Gln	Ser	Tyr	Ser	Pro	Gly
465					470					475					480
Gln	Asp	Cys	Val	Trp	Gly	Val	His	Val	Gln	Glu	Glu	Lys	Arg	Ile	Leu
			485					490						495	
Leu	Gln	Val	Glu	Ile	Leu	Asn	Val	Arg	Glu	Gly	Asp	Met	Leu	Thr	Leu
		500						505					510		
Phe	Asp	Gly	Asp	Gly	Pro	Ser	Ala	Arg	Val	Leu	Ala	Gln	Leu	Arg	Gly
	515						520					525			
Pro	Gln	Pro	Arg	Arg	Arg	Leu	Leu	Ser	Ser	Gly	Pro	Asp	Leu	Thr	Leu
	530					535					540				
Gln	Phe	Gln	Ala	Pro	Pro	Gly	Pro	Pro	Asn	Pro	Gly	Leu	Gly	Gln	Gly
545					550					555					560
Phe	Val	Leu	His	Phe	Lys	Glu	Val	Pro	Arg	Asn	Asp	Thr	Cys	Pro	Glu
			565					570						575	
Leu	Pro	Pro	Pro	Glu	Trp	Gly	Trp	Arg	Thr	Ala	Ser	His	Gly	Asp	Leu
		580						585					590		
Ile	Arg	Gly	Thr	Val	Leu	Thr	Tyr	Gln	Cys	Glu	Pro	Gly	Tyr	Glu	Leu
	595					600						605			
Leu	Gly	Ser	Asp	Ile	Leu	Thr	Cys	Gln	Trp	Asp	Leu	Ser	Trp	Ser	Ala
	610					615					620				
Ala	Pro	Pro	Ala	Cys	Gln	Lys	Ile	Met	Thr	Cys	Ala	Asp	Pro	Gly	Glu
625					630					635					640
Ile	Ala	Asn	Gly	His	Arg	Thr	Ala	Ser	Asp	Ala	Gly	Phe	Pro	Val	Gly
			645					650						655	
Ser	His	Val	Gln	Tyr	Arg	Cys	Leu	Pro	Gly	Tyr	Ser	Leu	Glu	Gly	Ala
		660						665					670		
Ala	Met	Leu	Thr	Cys	Tyr	Ser	Arg	Asp	Thr	Gly	Thr	Pro	Lys	Trp	Ser
	675						680					685			
Asp	Arg	Val	Pro	Lys	Cys	Ala	Leu	Lys	Tyr	Glu	Pro	Cys	Leu	Asn	Pro
	690					695					700				
Gly	Val	Pro	Glu	Asn	Gly	Tyr	Gln	Thr	Leu	Tyr	Lys	His	His	Tyr	Gln
705					710					715					720

Ala	Gly	Glu	Ser	Leu	Arg	Phe	Phe	Cys	Tyr	Glu	Gly	Phe	Glu	Leu	Ile
				725					730					735	
Gly	Glu	Val	Thr	Ile	Thr	Cys	Val	Pro	Gly	His	Pro	Ser	Gln	Trp	Thr
			740					745					750		
Ser	Gln	Pro	Pro	Leu	Cys	Lys	Val	Ala	Tyr	Glu	Glu	Leu	Leu	Asp	Asn
		755					760					765			
Arg	Lys	Leu	Glu	Val	Thr	Gln	Thr	Thr	Asp	Pro	Ser	Arg	Gln	Leu	Glu
	770					775				780					
Gly	Gly	Asn	Leu	Ala	Leu	Ala	Ile	Leu	Leu	Pro	Leu	Gly	Leu	Val	Ile
785					790					795					800
Val	Leu	Gly	Ser	Gly	Val	Tyr	Ile	Tyr	Tyr	Thr	Lys	Leu	Gln	Gly	Lys
			805					810					815		
Ser	Leu	Phe	Gly	Phe	Ser	Gly	Ser	His	Ser	Tyr	Ser	Pro	Ile	Thr	Val
		820					825					830			
Glu	Ser	Asp	Phe	Ser	Asn	Pro	Leu	Tyr	Glu	Ala	Gly	Asp	Thr	Arg	Glu
	835						840					845			
Tyr	Glu	Val	Ser	Ile	*										
	850			853											

<210> 1771
 <211> 650
 <212> PRT
 <213> Homo sapiens

<400> 1771

Met	Lys	Gln	Ile	Leu	Gly	Val	Ile	Asp	Lys	Lys	Leu	Arg	Asn	Leu	Glu
1				5					10					15	
Lys	Lys	Lys	Gly	Lys	Leu	Asp	Asp	Tyr	Gln	Glu	Arg	Met	Asn	Lys	Gly
		20					25					30			
Glu	Arg	Leu	Asn	Gln	Asp	Gln	Leu	Asp	Ala	Val	Ser	Lys	Tyr	Gln	Glu
	35					40					45				
Val	Thr	Asn	Asn	Leu	Glu	Phe	Ala	Lys	Glu	Leu	Gln	Arg	Ser	Phe	Met
	50					55					60				
Ala	Leu	Ser	Gln	Asp	Ile	Gln	Lys	Thr	Ile	Lys	Lys	Thr	Ala	Arg	Arg
65				70					75						80
Glu	Gln	Leu	Met	Arg	Glu	Glu	Ala	Glu	Gln	Lys	Arg	Leu	Lys	Thr	Val
			85					90					95		
Leu	Glu	Leu	Gln	Tyr	Val	Leu	Asp	Lys	Leu	Gly	Asp	Asp	Glu	Val	Arg
		100					105					110			
Thr	Asp	Leu	Lys	Gln	Gly	Leu	Asn	Gly	Val	Pro	Ile	Leu	Ser	Glu	Glu
	115					120						125			
Glu	Leu	Ser	Leu	Leu	Asp	Glu	Phe	Tyr	Lys	Leu	Val	Asp	Pro	Glu	Arg
	130					135					140				
Asp	Met	Ser	Leu	Arg	Leu	Asn	Glu	Gln	Tyr	Glu	His	Ala	Ser	Ile	His
145				150						155					160
Leu	Trp	Asp	Leu	Leu	Glu	Gly	Lys	Glu	Lys	Pro	Val	Cys	Gly	Thr	Thr
		165						170						175	
Tyr	Lys	Val	Leu	Lys	Glu	Ile	Val	Glu	Arg	Val	Phe	Gln	Ser	Asn	Tyr
		180						185					190		
Phe	Asp	Ser	Thr	His	Asn	His	Gln	Asn	Gly	Leu	Cys	Glu	Glu	Glu	Glu
	195					200						205			
Ala	Ala	Ser	Ala	Pro	Ala	Val	Glu	Asp	Gln	Val	Pro	Glu	Ala	Glu	Pro
	210					215						220			
Glu	Pro	Ala	Glu	Glu	Tyr	Thr	Glu	Gln	Ser	Glu	Val	Glu	Ser	Thr	Glu
225				230						235					240
Tyr	Val	Asn	Arg	Gln	Phe	Met	Ala	Glu	Thr	Gln	Phe	Thr	Ser	Gly	Glu
			245					250						255	
Lys	Glu	Gln	Val	Asp	Glu	Trp	Thr	Val	Glu	Thr	Val	Glu	Val	Val	Asn
		260						265					270		
Ser	Leu	Gln	Gln	Gln	Pro	Gln	Ala	Ser	Pro	Ser	Val	Pro	Glu	Pro	
		275					280					285			

His Ser Leu Thr Pro Val Ala Gln Ala Asp Pro Leu Val Arg Arg Gln
 290 295 300
 Arg Val Gln Asp Leu Met Ala Gln Met Gln Gly Pro Asp Asn Phe Ile
 305 310 315 320
 Gln Asp Ser Met Leu Asp Phe Glu Asn Gln Thr Leu Asp Pro Ala Ile
 325 330 335
 Val Ser Ala Gln Pro Met Asn Pro Thr Gln Asn Met Asp Met Pro Gln
 340 345 350
 Leu Val Cys Pro Pro Val His Ser Glu Ser Arg Leu Ala Gln Pro Asn
 355 360 365
 Gln Val Pro Val Gln Pro Glu Ala Thr Gln Val Pro Leu Val Ser Ser
 370 375 380
 Thr Ser Glu Gly Tyr Thr Ala Ser Gln Pro Leu Tyr Gln Pro Ser His
 385 390 395 400
 Ala Thr Glu Gln Arg Pro Gln Lys Glu Pro Ile Asp Gln Ile Gln Ala
 405 410 415
 Thr Ile Ser Leu Asn Thr Asp Gln Thr Thr Ala Ser Ser Ser Leu Pro
 420 425 430
 Ala Ala Ser Gln Pro Gln Val Phe Gln Ala Gly Thr Ser Lys Pro Leu
 435 440 445
 His Ser Ser Gly Ile Asn Val Asn Ala Ala Pro Phe Gln Ser Met Gln
 450 455 460
 Thr Val Phe Asn Met Asn Ala Pro Val Pro Pro Val Asn Glu Pro Glu
 465 470 475 480
 Thr Leu Lys Gln Gln Asn Gln Tyr Gln Ala Ser Tyr Asn Gln Ser Phe
 485 490 495
 Ser Ser Gln Pro His Gln Val Glu Gln Thr Glu Leu Gln Gln Glu Gln
 500 505 510
 Leu Gln Thr Val Val Gly Thr Tyr His Gly Ser Pro Asp Gln Ser His
 515 520 525
 Gln Val Thr Gly Asn His Gln Gln Pro Pro Gln Gln Asn Thr Gly Phe
 530 535 540
 Pro Arg Ser Asn Gln Pro Tyr Tyr Asn Ser Arg Gly Val Ser Arg Gly
 545 550 555 560
 Gly Ser Arg Gly Ala Arg Gly Leu Met Asn Gly Tyr Arg Gly Pro Ala
 565 570 575
 Met Asp Ser Glu Glu Asp Met Met Val Thr Ala Leu His Ser Leu Thr
 580 585 590
 Leu Gln Thr Val Val Ile His Ser Leu Ser Ser Val Leu Pro Gly Ile
 595 600 605
 Thr Leu Ala Ile Asn Gly Met Asp Ile Ser Arg Ile Ser Ser Glu Ala
 610 615 620
 Leu Gly Arg Val Asp His Gly Glu Pro His Glu Val Val Glu Gly Pro
 625 630 635 640
 Gln Asp Pro Thr Glu Gly Cys Arg Lys *
 645 649

<210> 1772

<211> 574

<212> PRT

<213> Homo sapiens

<400> 1772

Met Ala His Tyr Ile Thr Phe Leu Cys Met Val Leu Val Leu Leu Leu
 1 5 10 15
 Gln Asn Ser Val Leu Ala Glu Asp Gly Glu Val Arg Ser Ser Cys Arg
 20 25 30
 Thr Ala Pro Thr Asp Leu Val Phe Ile Leu Asp Gly Ser Tyr Ser Val
 35 40 45
 Gly Pro Glu Asn Phe Glu Ile Val Lys Lys Trp Leu Val Asn Ile Thr
 50 55 60

Lys	Asn	Phe	Asp	Ile	Gly	Pro	Lys	Phe	Ile	Gln	Val	Gly	Val	Val	Gln
65					70					75					80
Tyr	Ser	Asp	Tyr	Pro	Val	Leu	Glu	Ile	Pro	Leu	Gly	Ser	Tyr	Asp	Ser
				85					90					95	
Gly	Glu	His	Leu	Thr	Ala	Ala	Val	Glu	Ser	Ile	Leu	Tyr	Leu	Gly	Gly
			100					105					110		
Asn	Thr	Lys	Thr	Gly	Lys	Ala	Ile	Gln	Phe	Ala	Leu	Asp	Tyr	Leu	Phe
		115					120					125			
Ala	Lys	Ser	Ser	Arg	Phe	Leu	Thr	Lys	Ile	Ala	Val	Val	Leu	Thr	Asp
		130				135					140				
Gly	Lys	Ser	Gln	Asp	Asp	Val	Lys	Asp	Ala	Ala	Gln	Ala	Ala	Arg	Asp
145				150					155					160	
Ser	Lys	Ile	Thr	Leu	Phe	Ala	Ile	Gly	Val	Gly	Ser	Glu	Thr	Glu	Asp
				165				170						175	
Ala	Glu	Leu	Arg	Ala	Ile	Ala	Asn	Lys	Pro	Ser	Ser	Thr	Tyr	Val	Phe
			180					185						190	
Tyr	Val	Glu	Asp	Tyr	Ile	Ala	Ile	Ser	Lys	Ile	Arg	Glu	Val	Met	Lys
		195					200					205			
Gln	Lys	Leu	Cys	Glu	Glu	Ser	Val	Cys	Pro	Thr	Arg	Ile	Pro	Val	Ala
		210				215					220				
Ala	Arg	Asp	Glu	Arg	Gly	Phe	Asp	Ile	Leu	Leu	Gly	Leu	Asp	Val	Asn
225					230					235					240
Lys	Lys	Val	Lys	Lys	Arg	Ile	Gln	Leu	Ser	Pro	Lys	Lys	Ile	Lys	Gly
				245				250						255	
Tyr	Glu	Val	Thr	Ser	Lys	Val	Asp	Leu	Ser	Glu	Leu	Thr	Ser	Asn	Val
			260					265					270		
Phe	Pro	Glu	Gly	Leu	Pro	Pro	Ser	Tyr	Val	Phe	Val	Ser	Thr	Gln	Arg
		275					280					285			
Phe	Lys	Val	Lys	Lys	Ile	Trp	Asp	Leu	Trp	Arg	Ile	Leu	Thr	Ile	Asp
		290				295				300					
Gly	Arg	Pro	Gln	Ile	Ala	Val	Thr	Leu	Asn	Gly	Val	Asp	Lys	Ile	Leu
305					310					315					320
Leu	Phe	Thr	Thr	Thr	Ser	Val	Ile	Asn	Gly	Ser	Gln	Val	Val	Thr	Phe
				325					330					335	
Ala	Asn	Pro	Gln	Val	Lys	Thr	Leu	Phe	Asp	Glu	Gly	Trp	His	Gln	Ile
			340					345					350		
Arg	Leu	Leu	Val	Thr	Glu	Gln	Asp	Val	Thr	Leu	Tyr	Ile	Asp	Asp	Gln
		355					360					365			
Gln	Ile	Glu	Asn	Lys	Pro	Leu	His	Pro	Val	Leu	Gly	Ile	Leu	Ile	Asn
		370				375					380				
Gly	Gln	Thr	Gln	Ile	Gly	Lys	Tyr	Ser	Gly	Lys	Glu	Glu	Thr	Val	Gln
385					390					395					400
Phe	Asp	Val	Gln	Lys	Leu	Arg	Ile	Tyr	Cys	Asp	Pro	Glu	Gln	Asn	Asn
				405					410					415	
Arg	Glu	Thr	Ala	Cys	Glu	Ile	Pro	Gly	Phe	Cys	Leu	Asn	Gly	Pro	Ser
			420					425					430		
Asp	Val	Gly	Ser	Thr	Pro	Ala	Pro	Cys	Ile	Cys	Pro	Pro	Gly	Lys	Pro
		435					440					445			
Gly	Leu	Gln	Gly	Pro	Lys	Gly	Asp	Pro	Gly	Leu	Pro	Gly	Asn	Pro	Gly
		450				455					460				
Tyr	Pro	Gly	Gln	Pro	Gly	Gln	Asp	Gly	Lys	Pro	Val	Ser	Thr	Glu	Ser
465					470					475					480
Leu	Val	Ile	Ser	Gly	Ile	Ser	Gly	Ile	Thr	Gly	Tyr	Gln	Gly	Ile	Ala
				485					490					495	
Gly	Thr	Pro	Gly	Val	Pro	Gly	Ser	Pro	Gly	Ile	Gln	Gly	Ala	Arg	Gly
			500					505					510		
Leu	Pro	Gly	Tyr	Lys	Gly	Glu	Pro	Gly	Arg	Asp	Gly	Asp	Lys	Gly	Asp
		515					520					525			
Arg	Gly	Leu	Pro	Gly	Phe	Pro	Gly	Leu	His	Gly	Met	Pro	Gly	Ser	Lys
		530				535					540				
Gly	Glu	Met	Gly	Ala	Lys	Gly	Asp	Lys	Gly	Ser	Pro	Gly	Phe	Tyr	Gly
545					550					555					560
Lys	Lys	Gly	Ser	Ile	Asp	His	Thr	Thr	Lys	Tyr	Ser	Tyr	*		
				565					570			573			

<210> 1773
 <211> 1269
 <212> PRT
 <213> Homo sapiens

<400> 1773
 Met Ser Ala Pro Ala Gly Ser Ser His Pro Ala Ala Ser Ala Arg Ile
 1 5 10 15
 Pro Pro Lys Phe Gly Gly Ser Ala Val Ser Gly Ala Ala Ala Pro Ala
 20 25 30
 Gly Pro Gly Ala Gly Pro Ala Pro His Gln Gln Asn Gly Pro Ala Gln
 35 40 45
 Asn Gln Met Gln Val Pro Ser Gly Tyr Gly Leu His His Gln Asn Tyr
 50 55 60
 Ile Ala Pro Ser Gly His Tyr Ser Gln Gly Pro Gly Lys Met Thr Ser
 65 70 75 80
 Leu Pro Leu Asp Thr Gln Cys Gly Asp Tyr Tyr Ser Ala Leu Tyr Thr
 85 90 95
 Val Pro Thr Gln Asn Val Thr Pro Asn Thr Val Asn Gln Gln Pro Gly
 100 105 110
 Ala Gln Gln Leu Tyr Ser Arg Gly Pro Pro Ala Pro His Ile Val Gly
 115 120 125
 Ser Thr Leu Gly Ser Phe Gln Gly Ala Ala Ser Ser Ala Ser His Leu
 130 135 140
 His Thr Ser Ala Ser Gln Pro Tyr Ser Ser Phe Val Asn His Tyr Asn
 145 150 155 160
 Ser Pro Ala Met Tyr Ser Ala Ser Ser Ser Val Ala Ser Gln Gly Phe
 165 170 175
 Pro Ser Thr Cys Gly His Tyr Ala Met Ser Thr Val Ser Asn Ala Ala
 180 185 190
 Tyr Pro Ser Val Ser Tyr Pro Ser Leu Pro Ala Gly Asp Thr Tyr Gly
 195 200 205
 Gln Met Phe Thr Ser Gln Asn Ala Pro Thr Val Arg Pro Val Lys Asp
 210 215 220
 Asn Ser Phe Ser Gly Gln Asn Thr Ala Ile Ser His Pro Ser Pro Leu
 225 230 235 240
 Pro Pro Leu Pro Ser Gln Gln His His Gln Gln Gln Ser Leu Ser Gly
 245 250 255
 Tyr Ser Thr Leu Thr Trp Ser Ser Pro Gly Leu Pro Ser Thr Gln Asp
 260 265 270
 Asn Leu Ile Arg Asn His Thr Gly Ser Leu Ala Val Ala Asn Asn Asn
 275 280 285
 Pro Thr Ile Thr Val Ala Asp Ser Leu Ser Cys Pro Val Met Gln Asn
 290 295 300
 Val Gln Pro Pro Lys Ser Ser Pro Val Val Ser Thr Val Leu Ser Gly
 305 310 315 320
 Ser Ser Gly Ser Ser Ser Thr Arg Thr Pro Pro Thr Ala Asn His Pro
 325 330 335
 Val Glu Pro Val Thr Ser Val Thr Gln Pro Ser Glu Leu Leu Gln Gln
 340 345 350
 Lys Gly Val Gln Tyr Gly Glu Tyr Val Asn Asn Gln Ala Ser Ser Ala
 355 360 365
 Pro Thr Pro Leu Ser Ser Thr Ser Asp Asp Glu Glu Glu Glu Glu
 370 375 380
 Asp Glu Glu Ala Gly Val Asp Ser Ser Ser Thr Thr Ser Ser Ala Ser
 385 390 395 400
 Pro Met Pro Asn Ser Tyr Asp Ala Leu Glu Gly Gly Ser Tyr Pro Asp
 405 410 415
 Met Leu Ser Ser Ser Ala Ser Ser Pro Ala Pro Asp Pro Ala Pro Glu
 420 425 430

Pro	Asp	Pro	Ala	Ser	Ala	Pro	Ala	Pro	Ala	Ser	Ala	Pro	Ala	Pro	Val
		435					440					445			
Val	Pro	Gln	Pro	Ser	Lys	Met	Ala	Lys	Pro	Leu	Ala	Met	Ala	Ile	Gln
	450					455					460				
His	Phe	Ser	Leu	Val	Ile	Arg	Met	Leu	Gln	His	His	Leu	Phe	Leu	Glu
465					470					475					480
Tyr	Ser	Pro	Ser	Asn	Pro	Val	Tyr	Ser	Gly	Phe	Gln	Gln	Tyr	Pro	Gln
				485					490					495	
Gln	Tyr	Pro	Gly	Val	Asn	Gln	Leu	Ser	Ser	Ser	Ile	Gly	Gly	Leu	Ser
			500					505					510		
Leu	Gln	Ser	Ser	Pro	Gln	Pro	Glu	Ser	Leu	Arg	Pro	Val	Asn	Leu	Thr
		515					520					525			
Gln	Glu	Arg	Asn	Ile	Leu	Pro	Met	Thr	Pro	Val	Trp	Ala	Pro	Val	Pro
	530					535					540				
Asn	Leu	Asn	Ala	Asp	Leu	Lys	Lys	Leu	Asn	Cys	Ser	Pro	Asp	Ser	Phe
545					550					555					560
Arg	Cys	Thr	Leu	Thr	Asn	Ile	Pro	Gln	Thr	Gln	Ala	Leu	Leu	Asn	Lys
			565						570					575	
Ala	Lys	Leu	Pro	Leu	Gly	Leu	Leu	Leu	His	Pro	Phe	Arg	Asp	Leu	Thr
			580					585					590		
Gln	Leu	Pro	Val	Ile	Thr	Ser	Asn	Thr	Ile	Val	Arg	Cys	Arg	Ser	Cys
		595					600					605			
Arg	Thr	Tyr	Ile	Asn	Pro	Phe	Val	Ser	Phe	Ile	Asp	Gln	Arg	Arg	Trp
	610					615					620				
Lys	Cys	Asn	Leu	Cys	Tyr	Arg	Val	Asn	Asp	Val	Pro	Glu	Glu	Phe	Met
625					630				635						640
Tyr	Asn	Pro	Leu	Thr	Arg	Ser	Tyr	Gly	Glu	Pro	His	Lys	Arg	Pro	Glu
			645						650					655	
Val	Gln	Asn	Ser	Thr	Val	Glu	Phe	Ile	Ala	Ser	Ser	Asp	Tyr	Met	Leu
			660					665					670		
Arg	Pro	Pro	Gln	Pro	Ala	Val	Tyr	Leu	Phe	Val	Leu	Asp	Val	Ser	His
		675					680					685			
Asn	Ala	Val	Glu	Ala	Gly	Tyr	Leu	Thr	Ile	Leu	Cys	Gln	Ser	Leu	Leu
	690					695					700				
Glu	Asn	Leu	Asp	Lys	Leu	Pro	Gly	Asp	Ser	Arg	Thr	Arg	Ile	Gly	Phe
705					710					715					720
Met	Thr	Phe	Asp	Ser	Thr	Ile	His	Phe	Tyr	Asn	Leu	Gln	Glu	Gly	Leu
			725						730					735	
Ser	Gln	Pro	Gln	Met	Leu	Ile	Val	Ser	Asp	Ile	Asp	Asp	Val	Phe	Leu
			740					745					750		
Pro	Thr	Pro	Asp	Ser	Leu	Leu	Val	Asn	Leu	Tyr	Glu	Ser	Lys	Glu	Leu
		755					760						765		
Ile	Lys	Asp	Leu	Leu	Asn	Ala	Leu	Pro	Asn	Met	Phe	Thr	Asn	Thr	Arg
	770					775					780				
Glu	Thr	His	Ser	Ala	Leu	Gly	Pro	Ala	Leu	Gln	Ala	Ala	Phe	Lys	Leu
785					790					795					800
Met	Ser	Pro	Thr	Gly	Gly	Arg	Val	Ser	Val	Phe	Gln	Thr	Gln	Leu	Pro
				805					810					815	
Ser	Leu	Gly	Ala	Gly	Leu	Leu	Gln	Ser	Arg	Glu	Asp	Pro	Asn	Gln	Arg
			820					825					830		
Ser	Ser	Thr	Lys	Val	Val	Gln	His	Leu	Gly	Pro	Ala	Thr	Asp	Phe	Tyr
		835					840					845			
Lys	Lys	Leu	Ala	Leu	Asp	Cys	Ser	Gly	Gln	Gln	Thr	Ala	Val	Asp	Leu
	850					855					860				
Phe	Leu	Leu	Ser	Ser	Gln	Tyr	Ser	Asp	Leu	Ala	Ser	Leu	Ala	Cys	Met
865					870					875					880
Ser	Lys	Tyr	Ser	Ala	Gly	Cys	Ile	Tyr	Tyr	Tyr	Pro	Ser	Phe	His	Tyr
				885					890					895	
Thr	His	Asn	Pro	Ser	Gln	Ala	Glu	Lys	Leu	Gln	Lys	Asp	Leu	Lys	Arg
			900					905					910		
Tyr	Leu	Thr	Arg	Lys	Ile	Gly	Phe	Glu	Ala	Val	Met	Arg	Ile	Arg	Cys
		915					920					925			
Thr	Lys	Gly	Leu	Ser	Met	His	Thr	Phe	His	Gly	Asn	Phe	Phe	Val	Arg
	930					935					940				

Ser Thr Asp Leu Leu Ser Leu Ala Asn Ile Asn Pro Asp Ala Gly Phe
 945 950 955 960
 Ala Val Gln Leu Ser Ile Glu Glu Ser Leu Thr Asp Thr Ser Leu Val
 965 970 975
 Cys Phe Gln Thr Ala Leu Leu Tyr Thr Ser Ser Lys Gly Glu Arg Arg
 980 985 990
 Ile Arg Val His Thr Leu Cys Leu Pro Val Val Ser Ser Leu Ala Asp
 995 1000 1005
 Val Tyr Ala Gly Val Asp Val Gln Ala Ala Ile Cys Leu Leu Ala Asn
 1010 1015 1020
 Met Ala Val Asp Arg Ser Val Ser Ser Ser Leu Ser Asp Ala Arg Asp
 1025 1030 1035 1040
 Ala Leu Val Asn Ala Val Val Asp Ser Leu Ser Ala Tyr Gly Ser Thr
 1045 1050 1055
 Val Ser Asn Leu Gln His Ser Ala Leu Met Ala Pro Ser Ser Leu Lys
 1060 1065 1070
 Leu Phe Pro Leu Tyr Val Leu Ala Leu Leu Lys Gln Lys Ala Phe Arg
 1075 1080 1085
 Thr Gly Thr Ser Thr Arg Leu Asp Asp Arg Val Tyr Ala Met Cys Gln
 1090 1095 1100
 Ile Lys Ser Gln Pro Leu Val His Leu Met Lys Met Ile His Pro Asn
 1105 1110 1115 1120
 Leu Tyr Arg Ile Asp Arg Leu Thr Asp Glu Gly Ala Val His Val Asn
 1125 1130 1135
 Asp Arg Ile Val Pro Gln Pro Pro Leu Gln Lys Leu Ser Ala Glu Lys
 1140 1145 1150
 Leu Thr Arg Glu Gly Ala Phe Leu Met Asp Cys Gly Ser Val Phe Tyr
 1155 1160 1165
 Ile Trp Val Gly Lys Gly Cys Asp Asn Asn Phe Ile Glu Asp Val Leu
 1170 1175 1180
 Gly Tyr Thr Asn Phe Ala Ser Ile Pro Gln Lys Met Thr His Leu Pro
 1185 1190 1195 1200
 Glu Leu Asp Thr Leu Ser Ser Glu Arg Ala Arg Ser Phe Ile Thr Trp
 1205 1210 1215
 Leu Arg Asp Ser Arg Pro Leu Ser Pro Ile Leu His Ile Val Lys Asp
 1220 1225 1230
 Glu Ser Pro Ala Lys Ala Glu Phe Phe Gln His Leu Ile Glu Asp Arg
 1235 1240 1245
 Thr Glu Ala Ala Phe Ser Tyr Tyr Glu Phe Leu Leu His Val Gln Gln
 1250 1255 1260
 Gln Ile Cys Lys *
 1265 1268

<210> 1774

<211> 441

<212> PRT

<213> Homo sapiens

<400> 1774

Met Glu Thr Gly Gln Arg Thr His Ala Ser Gly Thr Tyr Ser Phe Leu
 1 5 10 15
 Asp Arg Thr Gln His Ser Asp Ile Lys Ala Asp Cys Asn Thr Cys Val
 20 25 30
 Glu Ile Glu Asp Arg Lys Val Ser Arg Gln Gln Met Asn Cys Glu Arg
 35 40 45
 Glu Gln Leu Arg Gly Asn Gln Glu Ala Ala Ala Ala Pro Asp Thr Met
 50 55 60
 Ala Gln Pro Tyr Ala Ser Ala Gln Phe Ala Pro Pro Gln Asn Gly Ile
 65 70 75 80
 Pro Ala Glu Tyr Thr Ala Pro His Pro His Pro Ala Pro Glu Tyr Thr
 85 90 95

Gly Gln Thr Thr Val Pro Glu His Thr Leu Asn Leu Tyr Pro Pro Ala
 100 105 110
 Gln Thr His Ser Glu Gln Ser Pro Ala Asp Thr Ser Ala Gln Thr Val
 115 120 125
 Ser Gly Thr Ala Thr Gln Thr Asp Asp Ala Ala Pro Thr Asp Gly Gln
 130 135 140
 Pro Gln Thr Gln Pro Ser Glu Asn Thr Glu Asn Lys Ser Gln Pro Lys
 145 150 155 160
 Arg Leu His Val Ser Asn Ile Pro Phe Arg Phe Arg Asp Pro Asp Leu
 165 170 175
 Arg Gln Met Phe Gly Gln Phe Gly Lys Ile Leu Asp Val Glu Ile Ile
 180 185 190
 Phe Asn Glu Arg Gly Ser Lys Gly Phe Gly Phe Val Thr Phe Glu Asn
 195 200 205
 Ser Ala Asp Ala Asp Arg Ala Arg Glu Lys Leu His Gly Thr Val Val
 210 215 220
 Glu Gly Arg Lys Ile Glu Val Asn Asn Ala Thr Ala Arg Val Met Thr
 225 230 235 240
 Asn Lys Lys Thr Val Asn Pro Tyr Thr Asn Gly Trp Lys Leu Asn Pro
 245 250 255
 Val Val Gly Ala Val Tyr Ser Pro Glu Phe Tyr Ala Gly Thr Val Leu
 260 265 270
 Leu Cys Gln Ala Asn Gln Glu Gly Ser Ser Met Tyr Ser Ala Pro Ser
 275 280 285
 Ser Leu Val Tyr Thr Ser Ala Met Pro Gly Phe Pro Tyr Pro Ala Ala
 290 295 300
 Thr Ala Ala Ala Ala Tyr Arg Gly Ala His Leu Arg Gly Arg Gly Arg
 305 310 315 320
 Thr Val Tyr Asn Thr Phe Arg Ala Ala Ala Pro Pro Pro Pro Ile Pro
 325 330 335
 Ala Tyr Gly Gly Val Val Tyr Gln Asp Gly Phe Tyr Gly Ala Asp Ile
 340 345 350
 Tyr Gly Gly Tyr Ala Ala Tyr Arg Tyr Ala Gln Pro Thr Pro Ala Thr
 355 360 365
 Ala Ala Ala Tyr Ser Asp Ser Tyr Gly Arg Val Tyr Ala Ala Asp Pro
 370 375 380
 Tyr His His Ala Leu Ala Pro Ala Pro Thr Tyr Gly Val Gly Ala Met
 385 390 395 400
 Asn Ala Phe Ala Pro Leu Thr Asp Ala Lys Thr Arg Ser His Ala Asp
 405 410 415
 Asp Val Gly Leu Val Leu Ser Ser Leu Gln Ala Ser Ile Tyr Arg Gly
 420 425 430
 Gly Tyr Asn Arg Phe Ala Pro Tyr *
 435 440

<210> 1775

<211> 747

<212> PRT

<213> Homo sapiens

<400> 1775

Met Thr Ile Pro Gly Leu Asp Trp Gly Met Glu Glu Val Met Gln Lys
 1 5 10 15
 Asp Gln Lys Lys Val Pro Gln Lys Lys Val Pro Tyr Ala Lys Pro Ile
 20 25 30
 Pro Ala Gln Phe Gln Gln Ala Trp Met Gln Asn Lys Val Pro Ile Pro
 35 40 45
 Ala Pro Asn Glu Val Leu Asn Asp Arg Lys Glu Asp Ile Lys Leu Glu
 50 55 60
 Glu Lys Lys Lys Thr Gln Ala Glu Ile Glu Gln Glu Met Ala Thr Leu
 65 70 75 80

Gln	Tyr	Thr	Asn	Pro	Gln	Leu	Leu	Glu	Gln	Leu	Lys	Ile	Glu	Arg	Leu
				85					90					95	
Ala	Gln	Lys	Gln	Val	Glu	Gln	Ile	Gln	Pro	Pro	Pro	Ser	Ser	Gly	Thr
			100					105					110		
Pro	Leu	Leu	Gly	Pro	Gln	Pro	Phe	Pro	Gly	Gln	Gly	Pro	Met	Ser	Gln
		115					120					125			
Ile	Pro	Gln	Gly	Phe	Gln	Gln	Pro	His	Pro	Ser	Gln	Gln	Met	Pro	Met
	130					135					140				
Asn	Met	Ala	Gln	Met	Gly	Pro	Pro	Gly	Pro	Gln	Gly	Gln	Phe	Arg	Pro
145					150					155					160
Pro	Gly	Pro	Gln	Gly	Gln	Met	Gly	Pro	Gln	Gly	Pro	Pro	Leu	His	Gln
			165						170					175	
Gly	Gly	Gly	Gly	Pro	Gln	Gly	Phe	Met	Gly	Pro	Gln	Gly	Pro	Gln	Gly
			180					185					190		
Pro	Pro	Gln	Gly	Leu	Pro	Arg	Pro	Gln	Asp	Met	His	Gly	Pro	Gln	Gly
		195				200						205			
Met	Gln	Arg	His	Pro	Gly	Pro	His	Gly	Pro	Leu	Gly	Pro	Gln	Gly	Pro
	210					215					220				
Pro	Gly	Pro	Gln	Gly	Ser	Ser	Gly	Pro	Gln	Gly	His	Met	Gly	Pro	Gln
225					230					235					240
Gly	Pro	Pro	Gly	Pro	Gln	Gly	His	Ile	Gly	Pro	Gln	Gly	Pro	Pro	Gly
			245					250						255	
Pro	Gln	Gly	His	Leu	Gly	Pro	Gln	Gly	Pro	Pro	Gly	Thr	Gln	Gly	Met
		260						265					270		
Gln	Gly	Pro	Pro	Gly	Pro	Arg	Gly	Met	Gln	Gly	Pro	Pro	His	Pro	His
		275				280						285			
Gly	Ile	Gln	Gly	Gly	Pro	Gly	Ser	Gln	Gly	Ile	Gln	Gly	Pro	Val	Ser
	290					295				300					
Gln	Gly	Pro	Leu	Met	Gly	Leu	Asn	Pro	Arg	Gly	Met	Gln	Gly	Pro	Pro
305					310					315					320
Gly	Pro	Arg	Glu	Asn	Gln	Gly	Pro	Ala	Pro	Gln	Gly	Met	Ile	Met	Gly
			325					330					335		
His	Pro	Pro	Gln	Glu	Met	Arg	Gly	Pro	His	Pro	Pro	Gly	Gly	Leu	Leu
			340					345					350		
Gly	His	Gly	Pro	Gln	Glu	Met	Arg	Gly	Pro	Gln	Glu	Ile	Arg	Gly	Met
		355					360					365			
Gln	Gly	Pro	Pro	Pro	Gln	Gly	Ser	Met	Leu	Gly	Pro	Pro	Gln	Glu	Leu
	370					375					380				
Arg	Gly	Pro	Pro	Gly	Ser	Gln	Ser	Gln	Gln	Gly	Pro	Pro	Gln	Gly	Ser
385					390					395					400
Leu	Gly	Pro	Pro	Pro	Gln	Gly	Gly	Met	Gln	Gly	Pro	Pro	Gly	Pro	Gln
			405						410					415	
Gly	Gln	Gln	Asn	Pro	Ala	Arg	Gly	Pro	His	Pro	Ser	Gln	Gly	Pro	Ile
			420					425					430		
Pro	Phe	Gln	Gln	Gln	Lys	Thr	Pro	Leu	Leu	Gly	Asp	Gly	Pro	Arg	Ala
		435					440					445			
Pro	Phe	Asn	Gln	Glu	Gly	Gln	Ser	Thr	Gly	Pro	Pro	Pro	Leu	Ile	Pro
	450					455					460				
Gly	Leu	Gly	Gln	Gln	Gly	Ala	Gln	Gly	Arg	Ile	Pro	Pro	Leu	Asn	Pro
465					470					475					480
Gly	Gln	Gly	Pro	Gly	Pro	Asn	Lys	Val	Ser	Glu	Glu	Glu	Pro	Arg	Arg
			485						490					495	
Gly	Met	Arg	Ala	Val	Leu	Pro	Pro	Glu	Glu	Gly	Met	Val	Phe	Leu	Val
			500					505					510		
Leu	Lys	Thr	Leu	Val	Gln	Arg	Arg	Ile	Leu	Met	Leu	Met	Arg	Glu	Ala
		515					520						525		
Ala	Arg	Gly	Arg	Asp	Leu	Arg	Gly	Arg	Gly	Arg	Gly	Thr	Pro	Arg	Gly
	530					535					540				
Gly	Arg	Lys	Gly	Leu	Leu	Pro	Thr	Pro	Asp	Glu	Phe	Pro	Arg	Phe	Glu
545					550					555					560
Gly	Gly	Arg	Lys	Pro	Asp	Ser	Trp	Asp	Gly	Asn	Arg	Glu	Pro	Gly	Pro
			565						570					575	
Gly	His	Glu	His	Phe	Arg	Asp	Thr	Pro	Arg	Pro	Asp	His	Pro	Pro	His
			580					585					590		

Asp	Gly	His	Ser	Pro	Ala	Ser	Arg	Glu	Arg	Ser	Ser	Ser	Leu	Gln	Gly
	595						600					605			
Met	Asp	Met	Ala	Ser	Leu	Pro	Pro	Arg	Lys	Arg	Pro	Trp	His	Asp	Gly
	610					615					620				
Pro	Gly	Thr	Ser	Glu	His	Arg	Glu	Met	Glu	Ala	Pro	Gly	Gly	Pro	Ser
625					630					635					640
Glu	Asp	Arg	Gly	Gly	Lys	Gly	Arg	Gly	Gly	Pro	Gly	Pro	Ala	Gln	Arg
			645					650						655	
Val	Pro	Lys	Ser	Gly	Arg	Ser	Ser	Ser	Leu	Asp	Gly	Glu	His	His	Asp
			660					665					670		
Gly	Tyr	His	Arg	Asp	Glu	Pro	Phe	Gly	Gly	Pro	Pro	Gly	Ser	Gly	Thr
	675						680					685			
Pro	Ser	Arg	Gly	Gly	Arg	Ser	Gly	Ser	Asn	Trp	Gly	Arg	Gly	Ser	Asn
	690					695					700				
Met	Asn	Ser	Gly	Pro	Pro	Arg	Arg	Gly	Ala	Phe	Leu	Gly	Gly	Gly	Arg
705					710					715					720
Gly	Pro	Val	Lys	Pro	Arg	Thr	Glu	Phe	Pro	Glu	Gly	Val	Phe	Gly	Gln
			725						730					735	
Ile	Val	Arg	Thr	Phe	Gly	Gly	Leu	His	Pro	*					
			740					745	746						

<210> 1776

<211> 254

<212> PRT

<213> Homo sapiens

<400> 1776

Met	Ala	Ala	Ala	Arg	Ala	Thr	Thr	Pro	Ala	Asp	Gly	Glu	Glu	Pro	Ala
1				5					10					15	
Pro	Glu	Ala	Glu	Ala	Leu	Ala	Ala	Ala	Arg	Glu	Arg	Ser	Ser	Arg	Phe
			20					25					30		
Leu	Ser	Gly	Leu	Glu	Leu	Val	Lys	Gln	Gly	Ala	Glu	Ala	Arg	Val	Phe
		35					40					45			
Arg	Gly	Arg	Phe	Gln	Gly	Arg	Ala	Ala	Val	Ile	Lys	His	Arg	Phe	Pro
	50					55				60					
Lys	Gly	Tyr	Arg	His	Pro	Ala	Leu	Glu	Ala	Arg	Leu	Gly	Arg	Arg	Arg
65					70					75					80
Thr	Val	Gln	Glu	Ala	Arg	Ala	Leu	Leu	Arg	Cys	Arg	Arg	Ala	Gly	Ile
				85					90					95	
Ser	Ala	Pro	Val	Val	Phe	Phe	Val	Asp	Tyr	Ala	Ser	Asn	Cys	Leu	Tyr
			100					105					110		
Met	Glu	Glu	Ile	Glu	Gly	Ser	Val	Thr	Val	Arg	Asp	Tyr	Ile	Gln	Ser
	115						120					125			
Thr	Met	Glu	Thr	Glu	Lys	Thr	Pro	Gln	Gly	Leu	Ser	Asn	Leu	Ala	Lys
	130					135						140			
Thr	Ile	Gly	Gln	Val	Leu	Ala	Arg	Met	His	Asp	Glu	Asp	Leu	Ile	His
145					150					155					160
Gly	Asp	Leu	Thr	Thr	Ser	Asn	Met	Leu	Leu	Lys	Pro	Pro	Leu	Glu	Gln
				165				170						175	
Leu	Asn	Ile	Val	Leu	Ile	Asp	Phe	Gly	Leu	Ser	Phe	Ile	Ser	Ala	Leu
			180					185					190		
Pro	Glu	Asp	Lys	Gly	Val	Asp	Leu	Tyr	Val	Leu	Glu	Lys	Ala	Phe	Leu
	195						200					205			
Ser	Thr	His	Pro	Asn	Thr	Glu	Thr	Val	Phe	Glu	Ala	Phe	Leu	Lys	Ser
	210					215					220				
Tyr	Ser	Thr	Ser	Ser	Lys	Lys	Ala	Arg	Pro	Val	Leu	Lys	Lys	Leu	Asp
225					230					235					240
Glu	Val	Arg	Leu	Arg	Gly	Arg	Lys	Arg	Ser	Met	Val	Gly	*		
			245						250			253			

<210> 1777
 <211> 394
 <212> PRT
 <213> Homo sapiens

<400> 1777
 Met Arg Thr Leu Phe Asn Leu Leu Trp Leu Ala Leu Ala Cys Ser Pro
 1 5 10 15
 Val His Thr Thr Leu Ser Lys Ser Asp Ala Lys Lys Ala Ala Ser Lys
 20 25 30
 Thr Leu Leu Glu Lys Ser Gln Phe Ser Asp Lys Pro Val Gln Asp Arg
 35 40 45
 Gly Leu Val Val Thr Asp Leu Lys Ala Glu Ser Val Val Leu Glu His
 50 55 60
 Arg Ser Tyr Cys Ser Ala Lys Ala Arg Asp Arg His Phe Ala Gly Asp
 65 70 75 80
 Val Leu Gly Tyr Val Thr Pro Trp Asn Ser His Gly Tyr Tyr Val Thr
 85 90 95
 Lys Val Phe Gly Ser Lys Phe Thr Gln Ile Ser Pro Val Trp Leu Gln
 100 105 110
 Leu Lys Arg Arg Gly Arg Glu Met Phe Glu Val Thr Gly Leu His Asp
 115 120 125
 Val Asp Gln Gly Trp Met Arg Ala Val Arg Lys His Ala Lys Gly Leu
 130 135 140
 His Ile Val Pro Arg Leu Leu Phe Glu Asp Trp Thr Tyr Asp Asp Phe
 145 150 155 160
 Arg Asn Val Leu Tyr Ser Glu Asp Glu Ile Glu Glu Leu Ser Lys Thr
 165 170 175
 Val Val Gln Val Ala Lys Asn Gln His Phe Asp Gly Phe Val Val Glu
 180 185 190
 Val Trp Asn Gln Leu Leu Ser Gln Lys Arg Val Gly Leu Ile His Met
 195 200 205
 Leu Thr His Leu Ala Glu Ala Leu His Gln Ala Arg Leu Leu Ala Leu
 210 215 220
 Leu Val Ile Pro Pro Ala Ile Thr Pro Gly Thr Asp Gln Leu Gly Met
 225 230 235 240
 Phe Thr His Lys Glu Phe Glu Gln Leu Ala Pro Val Leu Asp Gly Phe
 245 250 255
 Ser Leu Met Thr Tyr Asp Tyr Ser Thr Ala His Gln Pro Gly Pro Asn
 260 265 270
 Ala Pro Leu Ser Trp Val Arg Ala Cys Val Gln Val Leu Asp Pro Lys
 275 280 285
 Ser Lys Trp Arg Ser Lys Ile Leu Leu Gly Leu Asn Phe Tyr Gly Met
 290 295 300
 Asp Tyr Ala Thr Ser Lys Asp Ala Arg Glu Pro Val Val Gly Ala Arg
 305 310 315 320
 Tyr Ile Gln Thr Leu Lys Asp His Arg Pro Arg Met Val Trp Asp Ser
 325 330 335
 Gln Ala Ser Glu His Phe Phe Glu Tyr Lys Lys Ser Arg Ser Gly Arg
 340 345 350
 His Val Val Phe Tyr Pro Thr Leu Lys Ser Leu Gln Val Arg Leu Glu
 355 360 365
 Leu Ala Arg Glu Leu Gly Val Gly Val Ser Ile Trp Glu Leu Gly Gln
 370 375 380
 Gly Leu Asp Tyr Phe Tyr Asp Leu Leu *
 385 390 393

<210> 1778
 <211> 413
 <212> PRT

<213> Homo sapiens

<400> 1778

Met	Gly	Ser	Thr	Lys	His	Trp	Gly	Glu	Trp	Leu	Leu	Asn	Leu	Lys	Val
1				5				10						15	
Ala	Pro	Ala	Gly	Val	Phe	Gly	Val	Ala	Phe	Leu	Ala	Arg	Val	Ala	Leu
			20					25					30		
Val	Phe	Tyr	Gly	Val	Phe	Gln	Asp	Arg	Thr	Leu	His	Val	Arg	Tyr	Thr
		35					40					45			
Asp	Ile	Asp	Tyr	Gln	Val	Phe	Thr	Asp	Ala	Ala	Arg	Phe	Val	Thr	Glu
	50					55					60				
Gly	Arg	Ser	Pro	Tyr	Leu	Arg	Ala	Thr	Tyr	Arg	Tyr	Thr	Pro	Leu	Leu
65					70					75				80	
Gly	Trp	Leu	Leu	Thr	Pro	Asn	Ile	Tyr	Leu	Ser	Glu	Leu	Phe	Gly	Lys
				85					90					95	
Phe	Leu	Phe	Ile	Ser	Cys	Asp	Leu	Leu	Thr	Ala	Phe	Leu	Leu	Tyr	Arg
			100					105					110		
Leu	Leu	Leu	Leu	Lys	Gly	Leu	Gly	Arg	Arg	Gln	Ala	Cys	Gly	Tyr	Cys
		115					120					125			
Val	Phe	Trp	Leu	Leu	Asn	Pro	Leu	Pro	Met	Ala	Val	Ser	Ser	Arg	Gly
	130				135						140				
Asn	Ala	Asp	Ser	Ile	Val	Ala	Ser	Leu	Val	Leu	Met	Val	Leu	Tyr	Leu
145				150						155					160
Ile	Lys	Lys	Arg	Leu	Val	Ala	Cys	Ala	Ala	Val	Phe	Tyr	Gly	Phe	Ala
			165						170					175	
Val	His	Met	Lys	Ile	Tyr	Pro	Glu	Thr	Tyr	Ile	Leu	Pro	Ile	Thr	Leu
			180					185					190		
His	Leu	Leu	Pro	Asp	Arg	Asp	Asn	Asp	Lys	Ser	Leu	Arg	Gln	Phe	Arg
	195						200					205			
Thr	Arg	Leu	Cys	Asn	Arg	Thr	Ala	Leu	Met	Phe	Val	Ala	Val	Ala	Gly
	210					215					220				
Leu	Thr	Phe	Phe	Ala	Leu	Ser	Phe	Gly	Phe	Tyr	Tyr	Glu	Tyr	Gly	Trp
225				230						235					240
Glu	Phe	Leu	Glu	His	Thr	Tyr	Phe	Tyr	His	Leu	Thr	Arg	Arg	Asp	Ile
			245						250					255	
Arg	His	Asn	Phe	Ser	Pro	Tyr	Phe	Tyr	Met	Leu	Tyr	Leu	Thr	Ala	Glu
		260						265					270		
Ser	Lys	Trp	Ser	Phe	Ser	Leu	Gly	Ile	Ala	Ala	Phe	Leu	Pro	Gln	Leu
	275						280					285			
Ile	Leu	Leu	Ser	Ala	Val	Ser	Phe	Ala	Tyr	Tyr	Arg	Asp	Leu	Val	Phe
	290					295					300				
Cys	Cys	Phe	Leu	His	Thr	Ser	Ile	Phe	Val	Thr	Phe	Asn	Lys	Val	Cys
305				310						315					320
Thr	Ser	Gln	Tyr	Phe	Leu	Trp	Tyr	Leu	Cys	Leu	Leu	Pro	Leu	Val	Met
			325						330					335	
Pro	Leu	Val	Arg	Met	Pro	Trp	Lys	Arg	Ala	Val	Val	Leu	Leu	Met	Leu
		340						345					350		
Trp	Phe	Ile	Gly	Gln	Ala	Met	Trp	Leu	Ala	Pro	Ala	Tyr	Val	Leu	Glu
	355					360						365			
Phe	Gln	Gly	Lys	Asn	Thr	Phe	Leu	Phe	Ile	Trp	Leu	Ala	Gly	Leu	Phe
	370					375					380				
Phe	Leu	Leu	Ile	Asn	Cys	Ser	Ile	Leu	Ile	Gln	Ile	Ile	Ser	His	Tyr
385				390						395					400
Lys	Glu	Glu	Pro	Leu	Thr	Glu	Arg	Ile	Lys	Tyr	Asp	*			
			405						410		412				

<210> 1779

<211> 869

<212> PRT

<213> Homo sapiens

<400> 1779

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Met Arg Gly Ala Ala Ser Ala Ser Val Arg Glu Pro Thr Pro Leu Pro
 1          5          10          15
Gly Arg Gly Ala Pro Arg Thr Lys Pro Arg Ala Gly Arg Gly Pro Thr
          20          25          30
Val Gly Thr Pro Ala Thr Leu Ala Leu Pro Ala Arg Gly Arg Pro Arg
          35          40          45
Ser Arg Asn Gly Leu Ala Ser Lys Gly Gln Arg Gly Ala Ala Pro Thr
 50          55          60
Gly Pro Gly His Arg Ala Leu Pro Ser Arg Asp Thr Ala Leu Pro Gln
 65          70          75          80
Glu Arg Asn Lys Lys Leu Glu Ala Val Gly Thr Gly Ile Glu Pro Lys
          85          90          95
Ala Met Ser Gln Gly Leu Val Thr Phe Gly Asp Val Ala Val Asp Phe
          100          105          110
Ser Gln Glu Glu Trp Glu Trp Leu Asn Pro Ile Gln Arg Asn Leu Tyr
          115          120          125
Arg Lys Val Met Leu Glu Asn Tyr Arg Asn Leu Ala Ser Leu Gly Leu
          130          135          140
Cys Val Ser Lys Pro Asp Val Ile Ser Ser Leu Glu Gln Gly Lys Glu
          145          150          155          160
Pro Trp Thr Val Lys Arg Lys Met Thr Arg Ala Trp Cys Pro Asp Leu
          165          170          175
Lys Ala Val Trp Lys Ile Lys Glu Leu Pro Leu Lys Lys Asp Phe Cys
          180          185          190
Glu Gly Lys Leu Ser Gln Ala Val Ile Thr Glu Arg Leu Thr Ser Tyr
          195          200          205
Asn Leu Glu Tyr Ser Leu Leu Gly Glu His Trp Asp Tyr Asp Ala Leu
          210          215          220
Phe Glu Thr Gln Pro Gly Leu Val Thr Ile Lys Asn Leu Ala Val Asp
          225          230          235          240
Phe Arg Gln Gln Leu His Pro Ala Gln Lys Asn Phe Cys Lys Asn Gly
          245          250          255
Ile Trp Glu Asn Asn Ser Asp Leu Gly Ser Ala Gly His Cys Val Ala
          260          265          270
Lys Pro Asp Leu Val Ser Leu Leu Glu Gln Glu Lys Glu Pro Trp Met
          275          280          285
Val Lys Arg Glu Leu Thr Gly Ser Leu Phe Ser Gly Gln Arg Ser Val
          290          295          300
His Glu Thr Gln Glu Leu Phe Pro Lys Gln Asp Ser Tyr Ala Glu Gly
          305          310          315          320
Val Thr Asp Arg Thr Ser Asn Thr Lys Leu Asp Cys Ser Ser Phe Arg
          325          330          335
Glu Asn Trp Asp Ser Asp Tyr Val Phe Gly Arg Lys Leu Ala Val Gly
          340          345          350
Gln Glu Thr Gln Phe Arg Gln Glu Pro Ile Thr His Asn Lys Thr Leu
          355          360          365
Ser Lys Glu Arg Glu Arg Thr Tyr Asn Lys Ser Gly Arg Trp Ser Tyr
          370          375          380
Leu Asp Asp Ser Glu Glu Lys Val His Asn Arg Asp Ser Ile Lys Asn
          385          390          395          400
Phe Gln Lys Ser Ser Val Val Ile Lys Gln Thr Gly Ile Tyr Ala Gly
          405          410          415
Lys Lys Leu Phe Lys Cys Asn Glu Cys Lys Lys Thr Phe Thr Gln Ser
          420          425          430
Ser Ser Leu Thr Val His Gln Arg Ile His Thr Gly Glu Lys Pro Tyr
          435          440          445
Lys Cys Asn Glu Cys Gly Lys Ala Phe Ser Asp Gly Ser Ser Phe Ala
          450          455          460
Arg His Gln Arg Cys His Thr Gly Lys Lys Pro Tyr Glu Cys Ile Glu
          465          470          475          480
Cys Gly Lys Ala Phe Ile Gln Asn Thr Ser Leu Ile Arg His Trp Arg
          485          490          495

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Tyr Tyr His Thr Gly Glu Lys Pro Phe Asp Cys Ile Asp Cys Gly Lys
 500 505 510
 Ala Phe Ser Asp His Ile Gly Leu Asn Gln His Arg Arg Ile His Thr
 515 520 525
 Gly Glu Lys Pro Tyr Lys Cys Asp Val Cys His Lys Ser Phe Arg Tyr
 530 535 540
 Gly Ser Ser Leu Thr Val His Gln Arg Ile His Thr Gly Glu Lys Pro
 545 550 555 560
 Tyr Glu Cys Asp Val Cys Arg Lys Ala Phe Ser His His Ala Ser Leu
 565 570 575
 Thr Gln His Gln Arg Val His Ser Gly Glu Lys Pro Phe Lys Cys Lys
 580 585 590
 Glu Cys Gly Lys Ala Phe Arg Gln Asn Ile His Leu Ala Ser His Leu
 595 600 605
 Arg Ile His Thr Gly Glu Lys Pro Phe Glu Cys Ala Glu Cys Gly Lys
 610 615 620
 Ser Phe Ser Ile Ser Ser Gln Leu Ala Thr His Gln Arg Ile His Thr
 625 630 635 640
 Gly Glu Lys Pro Tyr Glu Cys Lys Val Cys Ser Lys Ala Phe Thr Gln
 645 650 655
 Lys Ala His Leu Ala Gln His Gln Lys Thr His Thr Gly Glu Lys Pro
 660 665 670
 Tyr Glu Cys Lys Glu Cys Gly Lys Ala Phe Ser Gln Thr Thr His Leu
 675 680 685
 Ile Gln His Gln Arg Val His Thr Gly Glu Lys Pro Tyr Lys Cys Met
 690 695 700
 Glu Cys Gly Lys Ala Phe Gly Asp Asn Ser Ser Cys Thr Gln His Gln
 705 710 715 720
 Arg Leu His Thr Gly Gln Arg Pro Tyr Glu Cys Ile Glu Cys Gly Lys
 725 730 735
 Ala Phe Lys Thr Lys Ser Ser Leu Ile Cys His Arg Arg Ser His Thr
 740 745 750
 Gly Glu Lys Pro Tyr Glu Cys Ser Val Cys Gly Lys Ala Phe Ser His
 755 760 765
 Arg Gln Ser Leu Ser Val His Gln Arg Ile His Ser Gly Lys Lys Pro
 770 775 780
 Tyr Glu Cys Lys Glu Cys Arg Lys Thr Phe Ile Gln Ile Gly His Leu
 785 790 795 800
 Asn Gln His Lys Arg Val His Thr Gly Glu Arg Ser Tyr Asn Tyr Lys
 805 810 815
 Lys Ser Arg Lys Val Phe Arg Gln Thr Ala His Leu Ala His His Gln
 820 825 830
 Arg Ile His Thr Gly Glu Ser Ser Thr Cys Pro Ser Leu Pro Ser Thr
 835 840 845
 Ser Asn Pro Val Asp Leu Phe Pro Lys Phe Leu Trp Asn Pro Ser Ser
 850 855 860
 Leu Pro Ser Pro *
 865 868

<210> 1780

<211> 278

<212> PRT

<213> Homo sapiens

<400> 1780

Met Gln His Leu Asp Cys Asp Leu Trp Leu Gln Leu Glu Leu Ser Ser
 1 5 10 15
 Gln Cys Val Leu Leu Gly Asn Gly Val Ala Met Asn Leu His Val Lys
 20 25 30
 Thr Leu Ser Leu Met Thr Trp Arg Ser Arg Phe Leu Glu Glu Ser Phe
 35 40 45

Trp	Ser	Leu	Glu	Glu	Thr	Ala	Ala	Leu	Ala	Lys	Gln	Leu	Pro	Leu	Lys
50						55					60				
Ser	Pro	Ser	Glu	Asn	Ile	Phe	Leu	His	Ile	Val	Asp	Leu	Ser	Asp	Pro
65					70					75					80
Lys	Gln	Ile	Trp	Lys	Phe	Val	Glu	Asn	Phe	Lys	Gln	Glu	His	Lys	Leu
				85					90					95	
His	Val	Leu	Ile	Asn	Asn	Ala	Gly	Cys	Met	Val	Asn	Lys	Arg	Glu	Leu
			100					105					110		
Thr	Glu	Asp	Gly	Leu	Glu	Lys	Asn	Phe	Ala	Ala	Asn	Thr	Leu	Gly	Val
		115					120					125			
Tyr	Ile	Leu	Thr	Thr	Gly	Leu	Ile	Pro	Val	Leu	Glu	Lys	Glu	His	Asp
	130				135						140				
Pro	Arg	Val	Ile	Thr	Val	Ser	Ser	Gly	Gly	Met	Leu	Val	Gln	Lys	Leu
145					150					155					160
Asn	Thr	Asn	Asp	Leu	Gln	Ser	Glu	Arg	Thr	Pro	Phe	Asp	Gly	Thr	Met
			165						170					175	
Val	Tyr	Ala	Gln	Asn	Lys	Arg	Gln	Gln	Val	Val	Leu	Thr	Glu	Arg	Trp
			180					185					190		
Ala	Gln	Gly	His	Pro	Ala	Ile	His	Phe	Ser	Ser	Met	His	Pro	Gly	Trp
		195					200					205			
Ala	Asp	Thr	Pro	Gly	Val	Arg	Gln	Ala	Met	Pro	Gly	Phe	His	Ala	Arg
	210					215					220				
Phe	Arg	Asp	Arg	Leu	Arg	Ser	Glu	Ala	Gln	Gly	Ala	Asp	Thr	Met	Leu
225					230					235					240
Trp	Leu	Ala	Leu	Ser	Ser	Ala	Ala	Ala	Ala	Gln	Pro	Ser	Gly	Arg	Ser
				245					250					255	
Arg	Val	Ser	Leu	Glu	Gly	Pro	Lys	Leu	Thr	Arg	Thr	Gln	Leu	Ser	Cys
			260					265					270		
Thr	Lys	Trp	Ser	Leu	*										
		275		277											

<210> 1781

<211> 199

<212> PRT

<213> Homo sapiens

<400> 1781

Met	Leu	Glu	Met	Asn	Met	Ala	Ile	Ala	Phe	Pro	Ala	Ala	Pro	Leu	Leu
1				5					10					15	
Thr	Val	Ile	Leu	Ala	Leu	Val	Gly	Met	Glu	Ala	Ile	Met	Ser	Glu	Phe
			20					25					30		
Phe	Asn	Asp	Thr	Thr	Thr	Ala	Phe	Tyr	Ile	Ile	Leu	Ile	Val	Trp	Leu
		35					40					45			
Ala	Asp	Gln	Tyr	Asp	Ala	Ile	Cys	Cys	His	Thr	Ser	Thr	Ser	Lys	Arg
	50					55					60				
His	Trp	Leu	Arg	Phe	Phe	Tyr	Leu	Tyr	His	Phe	Ala	Phe	Tyr	Ala	Tyr
65					70					75					80
His	Tyr	Arg	Phe	Asn	Gly	Gln	Tyr	Ser	Ser	Leu	Ala	Leu	Val	Thr	Ser
				85					90					95	
Trp	Leu	Phe	Ile	Gln	His	Ser	Met	Ile	Tyr	Phe	Phe	His	His	Tyr	Glu
			100					105					110		
Leu	Pro	Ala	Ile	Leu	Gln	Gln	Val	Arg	Ile	Gln	Glu	Met	Leu	Leu	Gln
		115					120					125			
Ala	Pro	Thr	Leu	Gly	Pro	Gly	Thr	Pro	Thr	Ala	Leu	Pro	Asp	Asp	Met
	130					135					140				
Asn	Asn	Asn	Ser	Gly	Ala	Pro	Ala	Thr	Ala	Pro	Asp	Ser	Ala	Gly	Gln
145					150					155					160
Pro	Pro	Ala	Leu	Gly	Pro	Val	Ser	Pro	Gly	Gly	Gln	Arg	Glu	Ser	Arg
				165					170					175	
Ala	Cys	Gly	Ser	Gly	Ala	Gln	Leu	Pro	Gly	Gly	Arg	Gly	Ser	Leu	Ser
			180					185					190		

Gly Ser Ser Cys Arg Trp *
 195 198

<210> 1782
 <211> 1456
 <212> PRT
 <213> Homo sapiens

<400> 1782
 Met Arg Leu Thr Arg His Glu Gln Ser Ala Pro Ala Leu Gly Gly Thr
 1 5 10 15
 Pro Glu Gln Thr Pro Gly Gln Gln Ser Pro Glu Asn Asp Asn Thr Ile
 20 25 30
 Lys Asp Leu Leu Pro Glu Asp Ala Gly Ile Asp His Gln Thr Val His
 35 40 45
 Gln Leu Ile Thr Val Leu Met Lys Phe Met Ala Lys Asp Glu Ser Ser
 50 55 60
 Ala Glu Ser Asp Ile Ser Ser Ala Lys Ala Phe Asn Thr Val Lys Arg
 65 70 75 80
 His Leu Tyr Val Leu Leu Gly Tyr Asp Gln Gln Glu Gly Cys Phe Met
 85 90 95
 Ile Ala Pro Gln Lys Met Arg Leu Ser Thr Cys Phe Asn Ala Phe Ile
 100 105 110
 Ala Gly Ile Ala Gln Val Met Asp Tyr Asn Ile Asn Leu Gly Lys His
 115 120 125
 Leu Leu Pro Leu Val Val Gln Val Leu Lys Tyr Cys Ser Cys Pro Gln
 130 135 140
 Leu Arg His Tyr Phe Gln Gln Pro Pro Arg Cys Ser Leu Trp Ser Leu
 145 150 155 160
 Lys Pro His Ile Arg Gln Met Trp Leu Lys Ala Leu Leu Val Ile Leu
 165 170 175
 Tyr Lys Tyr Pro Tyr Arg Asp Cys Asp Ile Ser Lys Ile Leu Leu His
 180 185 190
 Leu Ile His Ile Thr Val Asn Thr Leu Asn Ala Gln Tyr His Ser Cys
 195 200 205
 Lys Pro His Ala Thr Ala Gly Pro Leu Tyr Ser Asp Asn Ser Asn Ile
 210 215 220
 Ser Arg Tyr Ser Glu Lys Glu Lys Glu Glu Asp Ser Val Phe Asp Glu
 225 230 235 240
 Ser Asp Ile His Asp Thr Pro Thr Gly Pro Cys Asn Lys Glu Ser Gln
 245 250 255
 Thr Phe Phe Ala Arg Leu Lys Arg Ile Gly Gly Ser Lys Met Val Lys
 260 265 270
 Tyr Gln Pro Val Glu Met Asn Val Gln Arg Ser Glu Ile Glu Leu Ala
 275 280 285
 Glu Tyr Arg Glu Thr Gly Ala Leu Gln Asp Ser Leu Leu His Cys Val
 290 295 300
 Arg Glu Glu Ser Ile Pro Lys Lys Lys Leu Arg Ser Phe Lys Gln Lys
 305 310 315 320
 Ser Leu Asp Ile Gly Asn Ala Asp Ser Leu Leu Phe Thr Leu Asp Glu
 325 330 335
 His Arg Arg Lys Ser Cys Ile Asp Arg Cys Asp Ile Glu Lys Pro Pro
 340 345 350
 Thr Gln Ala Tyr Ile Ala Gln Arg Pro Asn Asp Pro Gly Arg Ser
 355 360 365
 Arg Gln Asn Ser Ala Thr Arg Pro Asp Asn Ser Glu Ile Pro Glu Asn
 370 375 380
 Pro Ala Met Glu Gly Phe Pro Asp Ala Arg Arg Pro Val Ile Pro Glu
 385 390 395 400
 Val Arg Leu Asn Cys Met Glu Thr Phe Glu Val Lys Val Asp Ser Pro
 405 410 415

Val	Lys	Pro	Ala	Pro	Lys	Glu	Asp	Leu	Asp	Leu	Ile	Asp	Leu	Ser	Ser
			420					425					430		
Asp	Ser	Thr	Ser	Gly	Pro	Glu	Lys	His	Ser	Ile	Leu	Ser	Thr	Ser	Asp
		435					440					445			
Ser	Asp	Ser	Leu	Val	Phe	Glu	Pro	Leu	Pro	Pro	Leu	Arg	Ile	Val	Glu
	450					455					460				
Ser	Asp	Glu	Glu	Glu	Glu	Thr	Met	Asn	Gln	Gly	Asp	Asp	Gly	Pro	Ser
465					470					475					480
Gly	Lys	Asn	Ala	Ala	Ser	Ser	Pro	Ser	Ile	Pro	Ser	His	Pro	Ser	Val
				485					490					495	
Leu	Ser	Leu	Ser	Thr	Ala	Pro	Leu	Val	Gln	Val	Ser	Val	Glu	Asp	Cys
			500					505					510		
Ser	Lys	Asp	Phe	Ser	Ser	Lys	Asp	Ser	Gly	Asn	Asn	Gln	Ser	Ala	Gly
		515					520					525			
Asn	Thr	Asp	Ser	Ala	Leu	Ile	Thr	Leu	Glu	Asp	Pro	Met	Asp	Ala	Glu
	530						535				540				
Gly	Ser	Ser	Lys	Pro	Glu	Glu	Leu	Pro	Glu	Phe	Ser	Cys	Gly	Ser	Pro
545					550					555					560
Leu	Thr	Leu	Lys	Gln	Lys	Arg	Asp	Leu	Leu	Gln	Lys	Ser	Phe	Ala	Leu
				565					570					575	
Pro	Glu	Met	Ser	Leu	Asp	Asp	His	Pro	Asp	Pro	Gly	Thr	Glu	Gly	Glu
			580					585					590		
Lys	Pro	Gly	Glu	Leu	Met	Pro	Ser	Ser	Gly	Ala	Lys	Thr	Val	Leu	Leu
		595					600					605			
Lys	Val	Pro	Glu	Asp	Ala	Glu	Asn	Pro	Thr	Glu	Ser	Glu	Lys	Pro	Asp
	610					615					620				
Thr	Ser	Ala	Glu	Ser	Asp	Thr	Glu	Gln	Asn	Pro	Glu	Arg	Lys	Val	Glu
625					630					635					640
Glu	Asp	Gly	Ala	Glu	Glu	Ser	Glu	Phe	Lys	Ile	Gln	Ile	Val	Pro	Arg
				645					650					655	
Gln	Arg	Lys	Gln	Arg	Lys	Ile	Ala	Val	Ser	Ala	Ile	Gln	Arg	Glu	Tyr
			660					665					670		
Leu	Asp	Ile	Ser	Phe	Asn	Ile	Leu	Asp	Lys	Leu	Gly	Glu	Gln	Lys	Asp
		675					680					685			
Pro	Asp	Pro	Ser	Thr	Lys	Gly	Leu	Ser	Thr	Leu	Glu	Met	Pro	Arg	Glu
	690					695					700				
Ser	Ser	Ser	Ala	Pro	Thr	Leu	Asp	Ala	Gly	Val	Pro	Glu	Thr	Ser	Ser
705					710					715					720
His	Ser	Ser	Ile	Ser	Thr	Gln	Tyr	Arg	Gln	Met	Lys	Arg	Gly	Ser	Leu
			725						730				735		
Gly	Val	Leu	Thr	Met	Ser	Gln	Leu	Met	Lys	Arg	Gln	Leu	Glu	His	Gln
			740					745					750		
Ser	Ser	Ala	Pro	His	Asn	Ile	Ser	Asn	Trp	Asp	Thr	Glu	Gln	Ile	Gln
		755					760					765			
Pro	Gly	Lys	Arg	Gln	Cys	Asn	Val	Pro	Thr	Cys	Leu	Asn	Pro	Asp	Leu
	770					775					780				
Glu	Gly	Gln	Pro	Leu	Arg	Met	Arg	Gly	Ala	Thr	Lys	Ser	Ser	Leu	Leu
785					790					795					800
Ser	Ala	Pro	Ser	Ile	Val	Ser	Met	Phe	Val	Pro	Ala	Pro	Glu	Glu	Phe
				805					810					815	
Thr	Asp	Glu	Gln	Pro	Thr	Val	Met	Thr	Asp	Lys	Cys	His	Asp	Cys	Gly
			820					825					830		
Ala	Ile	Leu	Glu	Glu	Tyr	Asp	Glu	Glu	Thr	Leu	Gly	Leu	Ala	Ile	Val
		835					840					845			
Val	Leu	Ser	Thr	Phe	Ile	His	Leu	Ser	Pro	Asp	Leu	Ala	Ala	Pro	Leu
	850					855					860				
Leu	Leu	Asp	Ile	Met	Gln	Ser	Val	Gly	Arg	Leu	Ala	Ser	Ser	Thr	Thr
865					870					875					880
Phe	Ser	Asn	Gln	Ala	Glu	Ser	Met	Met	Val	Pro	Gly	Asn	Ala	Ala	Gly
				885					890					895	
Val	Ala	Lys	Gln	Phe	Leu	Arg	Cys	Ile	Phe	His	Gln	Leu	Ala	Pro	Asn
			900					905					910		
Gly	Ile	Phe	Pro	Gln	Leu	Phe	Gln	Ser	Thr	Ile	Lys	Asp	Gly	Thr	Phe
		915					920					925			

3653

Val Glu Ile Gln Ser Ser Glu Ala Ala Ser Gln Phe Tyr Pro Leu *
 1445 1450 1455

<210> 1783
 <211> 426
 <212> PRT
 <213> Homo sapiens

<400> 1783
 Met Ala Thr Ala Glu Val Leu Asn Ile Gly Lys Lys Leu Tyr Glu Gly
 1 5 10 15
 Lys Thr Lys Glu Val Tyr Glu Leu Leu Asp Ser Pro Gly Lys Val Leu
 20 25 30
 Leu Gln Ser Lys Asp Gln Ile Thr Ala Gly Asn Ala Ala Arg Lys Asn
 35 40 45
 His Leu Glu Gly Lys Ala Ala Ile Ser Asn Lys Ile Thr Ser Cys Ile
 50 55 60
 Phe Gln Leu Leu Gln Glu Ala Gly Ile Lys Thr Ala Phe Thr Arg Lys
 65 70 75 80
 Cys Gly Glu Thr Ala Phe Ile Ala Pro Gln Cys Glu Met Ile Pro Ile
 85 90 95
 Glu Trp Val Cys Arg Arg Ile Ala Thr Gly Ser Phe Leu Lys Arg Asn
 100 105 110
 Pro Gly Val Lys Glu Gly Tyr Lys Phe Tyr Pro Pro Lys Val Glu Leu
 115 120 125
 Phe Phe Lys Asp Asp Ala Asn Asn Asp Pro Gln Trp Ser Glu Glu Gln
 130 135 140
 Leu Ile Ala Ala Lys Phe Cys Phe Ala Gly Leu Leu Ile Gly Gln Thr
 145 150 155 160
 Glu Val Asp Ile Met Ser His Ala Thr Gln Ala Ile Phe Glu Ile Leu
 165 170 175
 Glu Lys Ser Trp Leu Pro Gln Asn Cys Thr Leu Val Asp Met Lys Ile
 180 185 190
 Glu Phe Gly Val Asp Val Thr Thr Lys Glu Ile Val Leu Ala Asp Val
 195 200 205
 Ile Asp Asn Asp Ser Trp Arg Leu Trp Pro Ser Gly Asp Arg Ser Gln
 210 215 220
 Gln Lys Asp Lys Gln Ser Tyr Arg Asp Leu Lys Glu Val Thr Pro Glu
 225 230 235 240
 Gly Leu Gln Met Val Lys Lys Asn Phe Glu Trp Val Ala Glu Arg Val
 245 250 255
 Glu Leu Leu Leu Lys Ser Glu Ser Gln Cys Arg Val Val Val Leu Met
 260 265 270
 Gly Ser Thr Ser Asp Leu Gly His Cys Glu Lys Ile Lys Lys Ala Cys
 275 280 285
 Gly Asn Phe Gly Ile Pro Cys Glu Leu Arg Val Thr Ser Ala His Lys
 290 295 300
 Gly Pro Asp Glu Thr Leu Arg Ile Lys Ala Glu Tyr Glu Gly Asp Gly
 305 310 315 320
 Ile Pro Thr Val Phe Val Ala Val Ala Gly Arg Ser Asn Gly Leu Gly
 325 330 335
 Pro Val Met Ser Gly Asn Thr Ala Tyr Pro Val Ile Ser Cys Pro Pro
 340 345 350
 Leu Thr Pro Asp Trp Gly Val Gln Asp Val Trp Ser Ser Leu Arg Leu
 355 360 365
 Pro Ser Gly Leu Gly Cys Ser Thr Val Leu Ser Pro Glu Gly Ser Ala
 370 375 380
 Gln Phe Ala Ala Gln Ile Phe Gly Leu Ser Asn His Leu Val Trp Ser
 385 390 395 400
 Lys Leu Arg Ala Ser Ile Leu Asn Thr Trp Ile Ser Leu Lys Gln Ala
 405 410 415

Asp Lys Lys Ile Arg Glu Cys Asn Leu *
 420 425

<210> 1784
 <211> 367
 <212> PRT
 <213> Homo sapiens

<400> 1784
 Met Pro Met Ile Ser Val Leu Gly Lys Met Phe Leu Trp Gln Arg Glu
 1 5 10 15
 Gly Pro Gly Gly Arg Trp Thr Cys Gln Thr Ser Arg Arg Val Ser Ser
 20 25 30
 Asp Pro Ala Trp Ala Val Glu Trp Ile Glu Leu Pro Arg Gly Leu Ser
 35 40 45
 Leu Ser Ser Leu Gly Ser Ala Arg Thr Leu Arg Gly Trp Ser Arg Ser
 50 55 60
 Ser Arg Pro Ser Ser Val Asp Ser Gln Asp Leu Pro Glu Val Asn Val
 65 70 75 80
 Gly Asp Thr Val Ala Met Leu Pro Lys Ser Arg Arg Ala Leu Thr Ile
 85 90 95
 Gln Glu Ile Ala Ala Leu Ala Arg Ser Ser Leu His Gly Ile Ser Gln
 100 105 110
 Val Val Lys Asp His Val Thr Lys Pro Thr Ala Met Ala Gln Gly Arg
 115 120 125
 Val Ala His Leu Ile Glu Trp Lys Gly Trp Ser Lys Pro Ser Asp Ser
 130 135 140
 Pro Ala Ala Leu Glu Ser Ala Phe Ser Ser Tyr Ser Asp Leu Ser Glu
 145 150 155 160
 Gly Glu Gln Glu Ala Arg Phe Ala Ala Gly Val Ala Glu Gln Phe Ala
 165 170 175
 Ile Ala Glu Ala Lys Leu Arg Ala Trp Ser Ser Val Asp Gly Glu Asp
 180 185 190
 Ser Thr Asp Asp Ser Tyr Asp Glu Asp Phe Ala Gly Gly Met Asp Thr
 195 200 205
 Asp Met Ala Gly Gln Leu Pro Leu Gly Pro His Leu Gln Asp Leu Phe
 210 215 220
 Thr Gly His Arg Phe Ser Arg Pro Val Arg Gln Gly Ser Val Glu Pro
 225 230 235 240
 Glu Ser Asp Cys Ser Gln Thr Val Ser Pro Asp Thr Leu Cys Ser Ser
 245 250 255
 Leu Cys Ser Leu Glu Asp Gly Leu Leu Gly Ser Pro Ala Arg Leu Ala
 260 265 270
 Ser Gln Leu Leu Gly Asp Glu Leu Leu Leu Ala Lys Leu Pro Pro Ser
 275 280 285
 Arg Glu Ser Ala Phe Arg Ser Leu Gly Pro Leu Glu Ala Gln Asp Ser
 290 295 300
 Leu Tyr Asn Ser Pro Leu Thr Glu Ser Cys Leu Ser Pro Ala Glu Glu
 305 310 315 320
 Glu Pro Ala Pro Cys Lys Asp Cys Gln Pro Leu Cys Pro Pro Leu Thr
 325 330 335
 Gly Ser Trp Glu Arg Gln Arg Gln Ala Ser Asp Leu Ala Ser Ser Gly
 340 345 350
 Val Val Ser Leu Asp Glu Asp Glu Ala Glu Pro Glu Glu Gln *
 355 360 365 366

<210> 1785
 <211> 629
 <212> PRT

<213> Homo sapiens

<400> 1785

Met	Ser	Pro	Gly	Gly	Lys	Phe	Asp	Phe	Asp	Asp	Gly	Gly	Cys	Tyr	Val	1	5	10	15
Gly	Gly	Trp	Glu	Ala	Gly	Arg	Ala	His	Gly	Tyr	Gly	Val	Cys	Thr	Gly	20	25	30	
Pro	Gly	Ala	Gln	Gly	Glu	Tyr	Ser	Gly	Cys	Trp	Ala	His	Gly	Phe	Glu	35	40	45	
Ser	Leu	Gly	Val	Phe	Thr	Gly	Pro	Gly	Gly	His	Ser	Tyr	Gln	Gly	His	50	55	60	
Trp	Gln	Gln	Gly	Lys	Arg	Glu	Gly	Leu	Gly	Val	Glu	Arg	Lys	Ser	Arg	65	70	75	80
Trp	Thr	Tyr	Arg	Gly	Glu	Trp	Leu	Gly	Gly	Leu	Lys	Gly	Arg	Ser	Gly	85	90	95	
Val	Trp	Glu	Ser	Val	Ser	Gly	Leu	Arg	Tyr	Ala	Gly	Leu	Trp	Lys	Asp	100	105	110	
Gly	Phe	Gln	Asp	Gly	Tyr	Gly	Thr	Glu	Thr	Tyr	Ser	Asp	Gly	Gly	Thr	115	120	125	
Tyr	Gln	Gly	Gln	Trp	Gln	Ala	Gly	Lys	Arg	His	Gly	Tyr	Gly	Val	Arg	130	135	140	
Gln	Ser	Val	Pro	Tyr	His	Gln	Ala	Ala	Leu	Leu	Arg	Ser	Pro	Arg	Arg	145	150	155	160
Thr	Ser	Leu	Asp	Ser	Gly	His	Ser	Asp	Pro	Pro	Thr	Pro	Pro	Pro	Pro	165	170	175	
Leu	Pro	Leu	Pro	Gly	Asp	Glu	Gly	Gly	Ser	Pro	Ala	Ser	Gly	Ser	Arg	180	185	190	
Gly	Gly	Phe	Val	Leu	Ala	Gly	Pro	Gly	Asp	Ala	Asp	Gly	Ala	Ser	Ser	195	200	205	
Arg	Lys	Arg	Thr	Pro	Ala	Ala	Gly	Gly	Phe	Phe	Arg	Arg	Ser	Leu	Leu	210	215	220	
Leu	Ser	Gly	Leu	Arg	Ala	Gly	Gly	Arg	Arg	Ser	Ser	Leu	Gly	Ser	Lys	225	230	235	240
Arg	Gly	Ser	Leu	Arg	Ser	Glu	Val	Ser	Ser	Glu	Val	Gly	Ser	Thr	Gly	245	250	255	
Pro	Pro	Gly	Ser	Glu	Ala	Ser	Gly	Pro	Pro	Ala	Ala	Ala	Pro	Pro	Ala	260	265	270	
Leu	Ile	Glu	Gly	Ser	Ala	Thr	Glu	Val	Tyr	Ala	Gly	Glu	Trp	Arg	Ala	275	280	285	
Asp	Arg	Arg	Ser	Gly	Phe	Gly	Val	Ser	Gln	Arg	Ser	Asn	Gly	Leu	Arg	290	295	300	
Tyr	Glu	Gly	Glu	Trp	Leu	Gly	Asn	Arg	Arg	His	Gly	Tyr	Gly	Arg	Thr	305	310	315	320
Thr	Arg	Pro	Asp	Gly	Ser	Arg	Glu	Glu	Gly	Lys	Tyr	Lys	Arg	Asn	Arg	325	330	335	
Leu	Val	His	Gly	Gly	Arg	Val	Arg	Ser	Leu	Leu	Pro	Leu	Ala	Leu	Arg	340	345	350	
Arg	Gly	Lys	Val	Lys	Glu	Lys	Val	Asp	Arg	Ala	Val	Glu	Gly	Ala	Arg	355	360	365	
Arg	Ala	Val	Ser	Ala	Ala	Arg	Gln	Arg	Gln	Glu	Ile	Ala	Ala	Ala	Arg	370	375	380	
Ala	Ala	Asp	Ala	Leu	Leu	Lys	Ala	Val	Ala	Ala	Ser	Ser	Val	Ala	Glu	385	390	395	400
Lys	Ala	Val	Glu	Ala	Ala	Arg	Met	Ala	Lys	Leu	Ile	Ala	Gln	Asp	Leu	405	410	415	
Gln	Pro	Met	Leu	Glu	Ala	Pro	Gly	Arg	Arg	Pro	Arg	Gln	Asp	Ser	Glu	420	425	430	
Gly	Ser	Asp	Thr	Glu	Pro	Leu	Asp	Glu	Asp	Ser	Pro	Gly	Val	Tyr	Glu	435	440	445	
Asn	Gly	Leu	Thr	Pro	Ser	Glu	Gly	Ser	Pro	Glu	Leu	Pro	Ser	Ser	Pro	450	455	460	
Ala	Ser	Ser	Arg	Gln	Pro	Trp	Arg	Pro	Pro	Ala	Cys	Arg	Ser	Pro	Leu	465	470	475	480

Pro Pro Gly Gly Asp Gln Gly Pro Phe Ser Ser Pro Lys Ala Trp Pro
 485 490 495
 Glu Glu Trp Gly Gly Ala Gly Ala Gln Ala Glu Glu Leu Ala Gly Tyr
 500 505 510
 Glu Ala Glu Asp Glu Ala Gly Met Gln Gly Pro Gly Pro Arg Asp Gly
 515 520 525
 Ser Pro Leu Leu Gly Gly Cys Ser Asp Ser Ser Gly Ser Leu Arg Glu
 530 535 540
 Glu Glu Gly Glu Asp Glu Glu Pro Leu Pro Pro Leu Arg Ala Pro Ala
 545 550 555 560
 Gly Thr Glu Pro Glu Pro Ile Ala Met Leu Val Leu Arg Gly Ser Ser
 565 570 575
 Ser Arg Gly Pro Asp Ala Gly Cys Leu Thr Glu Glu Leu Gly Glu Pro
 580 585 590
 Ala Ala Thr Glu Arg Pro Ala Gln Pro Gly Ala Ala Asn Pro Leu Val
 595 600 605
 Val Gly Ala Val Ala Leu Leu Asp Leu Ser Leu Ala Phe Leu Phe Ser
 610 615 620
 Gln Leu Leu Thr *
 625 628

<210> 1786
 <211> 1119
 <212> PRT
 <213> Homo sapiens

<400> 1786
 Met Ser Thr Ala Ala Phe His Ile Ser Ser Leu Leu Glu Lys Met Thr
 1 5 10 15
 Ser Ser Asp Lys Asp Phe Arg Phe Met Ala Thr Ser Asp Leu Met Ser
 20 25 30
 Glu Leu Gln Lys Asp Ser Ile Gln Leu Asp Glu Asp Ser Glu Arg Lys
 35 40 45
 Val Val Lys Met Leu Leu Arg Leu Leu Glu Asp Lys Asn Gly Glu Val
 50 55 60
 Gln Asn Leu Ala Val Lys Trp Leu Gly Val Pro Leu Gly Ala Phe His
 65 70 75 80
 Ala Ser Leu Leu His Cys Leu Leu Pro Gln Leu Ser Ser Pro Arg Leu
 85 90 95
 Ala Val Arg Lys Arg Ala Val Gly Ala Leu Gly His Leu Ala Ala Ala
 100 105 110
 Cys Ser Thr Asp Leu Phe Val Glu Leu Ala Asp His Leu Leu Asp Arg
 115 120 125
 Leu Pro Gly Pro Arg Val Pro Thr Ser Pro Thr Ala Ile Arg Thr Leu
 130 135 140
 Ile Gln Cys Leu Gly Ser Val Gly Arg Gln Ala Gly His Arg Leu Gly
 145 150 155 160
 Ala His Leu Asp Arg Leu Val Pro Leu Val Glu Asp Phe Cys Asn Leu
 165 170 175
 Asp Asp Asp Glu Leu Arg Glu Ser Cys Leu Gln Ala Phe Glu Ala Phe
 180 185 190
 Leu Arg Lys Cys Pro Lys Glu Met Gly Pro His Val Pro Asn Val Thr
 195 200 205
 Ser Leu Cys Leu Gln Tyr Ile Lys His Asp Pro Asn Tyr Asn Tyr Asp
 210 215 220
 Ser Asp Glu Asp Glu Glu Gln Met Glu Thr Glu Asp Ser Glu Phe Ser
 225 230 235 240
 Glu Gln Glu Ser Glu Asp Glu Tyr Ser Asp Asp Asp Met Ser Trp
 245 250 255
 Lys Val Arg Arg Ala Ala Ala Lys Cys Ile Ala Ala Leu Ile Ser Ser
 260 265 270

Arg	Pro	Asp	Leu	Leu	Pro	Asp	Phe	His	Cys	Thr	Leu	Ala	Pro	Val	Leu
		275					280					285			
Ile	Arg	Arg	Phe	Lys	Glu	Arg	Glu	Glu	Asn	Val	Lys	Ala	Asp	Val	Phe
	290					295					300				
Thr	Ala	Tyr	Ile	Val	Leu	Leu	Arg	Gln	Thr	Arg	Pro	Pro	Lys	Gly	Trp
305					310					315					320
Leu	Glu	Ala	Met	Glu	Glu	Pro	Thr	Gln	Thr	Gly	Ser	Asn	Leu	His	Met
				325					330					335	
Leu	Arg	Gly	Gln	Val	Pro	Leu	Val	Val	Lys	Ala	Leu	Gln	Arg	Gln	Leu
			340					345					350		
Lys	Asp	Arg	Ser	Val	Arg	Ala	Arg	Gln	Gly	Cys	Phe	Ser	Leu	Leu	Thr
	355					360					365				
Glu	Leu	Ala	Gly	Val	Leu	Pro	Gly	Ser	Leu	Ala	Glu	His	Met	Pro	Val
	370					375					380				
Leu	Val	Ser	Gly	Ile	Ile	Phe	Ser	Leu	Ala	Asp	Arg	Ser	Ser	Ser	Ser
385					390					395					400
Thr	Ile	Arg	Met	Asp	Ala	Leu	Ala	Phe	Leu	Gln	Gly	Leu	Leu	Gly	Thr
			405					410						415	
Glu	Pro	Ala	Glu	Ala	Phe	His	Pro	His	Leu	Pro	Ile	Leu	Leu	Pro	Pro
			420					425					430		
Val	Met	Ala	Cys	Val	Ala	Asp	Ser	Phe	Tyr	Lys	Ile	Ala	Ala	Glu	Ala
	435					440						445			
Leu	Val	Val	Leu	Gln	Glu	Leu	Val	Arg	Ala	Leu	Trp	Pro	Leu	His	Arg
	450					455					460				
Pro	Arg	Met	Leu	Asp	Pro	Glu	Pro	Tyr	Val	Gly	Glu	Met	Ser	Ala	Val
465					470					475					480
Thr	Leu	Ala	Arg	Leu	Arg	Ala	Thr	Asp	Leu	Asp	Gln	Glu	Val	Lys	Glu
			485					490						495	
Arg	Ala	Ile	Ser	Cys	Met	Gly	His	Leu	Val	Gly	His	Leu	Gly	Asp	Arg
			500					505					510		
Leu	Gly	Asp	Asp	Leu	Glu	Pro	Thr	Leu	Leu	Leu	Leu	Leu	Asp	Arg	Leu
	515						520					525			
Arg	Asn	Glu	Ile	Thr	Arg	Leu	Pro	Ala	Ile	Lys	Ala	Leu	Thr	Leu	Val
	530					535					540				
Ala	Val	Ser	Pro	Leu	Gln	Leu	Asp	Leu	Gln	Pro	Ile	Leu	Ala	Glu	Ala
545					550					555					560
Leu	His	Ile	Leu	Ala	Ser	Phe	Leu	Arg	Lys	Asn	Gln	Arg	Ala	Leu	Arg
			565					570						575	
Leu	Ala	Thr	Leu	Ala	Ala	Leu	Asp	Ala	Leu	Ala	Gln	Ser	Gln	Gly	Leu
			580					585					590		
Ser	Leu	Pro	Pro	Ser	Ala	Val	Gln	Ala	Val	Leu	Ala	Glu	Leu	Pro	Ala
	595					600						605			
Leu	Val	Asn	Glu	Ser	Asp	Met	His	Val	Ala	Gln	Leu	Ala	Val	Asp	Phe
	610				615					620					
Leu	Ala	Thr	Val	Thr	Gln	Ala	Gln	Pro	Ala	Ser	Leu	Val	Glu	Val	Ser
625					630					635					640
Gly	Pro	Val	Leu	Ser	Glu	Leu	Leu	Arg	Leu	Leu	Arg	Ser	Pro	Leu	Leu
			645					650						655	
Pro	Ala	Gly	Val	Leu	Ala	Ala	Ala	Glu	Gly	Phe	Leu	Gln	Ala	Leu	Val
			660					665					670		
Gly	Thr	Arg	Pro	Pro	Cys	Val	Asp	Tyr	Ala	Lys	Leu	Ile	Ser	Leu	Leu
	675					680						685			
Thr	Ala	Pro	Val	Tyr	Glu	Gln	Ala	Val	Asp	Gly	Gly	Pro	Gly	Leu	His
	690				695						700				
Lys	Gln	Val	Phe	His	Ser	Leu	Ala	Arg	Cys	Val	Ala	Ala	Leu	Ser	Ala
705					710					715					720
Ala	Cys	Pro	Gln	Glu	Ala	Ala	Ser	Thr	Ala	Ser	Arg	Leu	Val	Cys	Asp
			725					730						735	
Ala	Arg	Ser	Pro	His	Ser	Ser	Thr	Gly	Val	Lys	Val	Leu	Ala	Phe	Leu
			740					745					750		
Ser	Leu	Ala	Glu	Val	Gly	Gln	Val	Ala	Gly	Pro	Gly	Pro	Gln	Arg	Glu
	755					760						765			
Leu	Lys	Ala	Val	Leu	Leu	Glu	Ala	Leu	Gly	Ser	Pro	Ser	Glu	Asp	Val
	770					775									

Arg Ala Ala Ala Ser Tyr Ala Leu Gly Arg Val Gly Ala Gly Ser Leu
 785 790 795 800
 Pro Asp Phe Leu Pro Phe Leu Leu Glu Gln Ile Glu Ala Glu Pro Arg
 805 810 815
 Arg Gln Tyr Leu Leu Leu His Ser Leu Arg Glu Ala Leu Gly Ala Ala
 820 825 830
 Gln Pro Asp Ser Leu Lys Pro Tyr Ala Glu Asp Ile Trp Ala Leu Leu
 835 840 845
 Phe Gln Arg Cys Glu Gly Ala Glu Glu Gly Thr Arg Gly Val Val Ala
 850 855 860
 Glu Cys Ile Gly Lys Leu Val Leu Val Asn Pro Ser Phe Leu Leu Pro
 865 870 875 880
 Arg Leu Arg Lys Gln Leu Ala Ala Gly Arg Pro His Thr Arg Ser Thr
 885 890 895
 Val Ile Thr Ala Val Lys Phe Leu Ile Ser Asp Gln Pro His Pro Ile
 900 905 910
 Asp Pro Leu Leu Lys Ser Phe Ile Ala Val His Asn Lys Pro Ser Leu
 915 920 925
 Val Arg Asp Leu Leu Asp Asp Ile Leu Pro Leu Leu Tyr Gln Glu Thr
 930 935 940
 Lys Ile Arg Arg Asp Leu Ile Arg Glu Val Glu Met Gly Pro Phe Lys
 945 950 955 960
 His Thr Val Asp Asp Gly Leu Asp Val Arg Lys Ala Ala Phe Glu Cys
 965 970 975
 Met Tyr Ser Leu Leu Glu Ser Cys Leu Gly Gln Leu Asp Ile Cys Glu
 980 985 990
 Phe Leu Asn His Val Glu Asp Gly Leu Lys Asp His Tyr Asp Ile Arg
 995 1000 1005
 Met Leu Thr Phe Ile Met Val Ala Arg Leu Ala Thr Leu Cys Pro Ala
 1010 1015 1020
 Pro Val Leu Gln Arg Val Asp Arg Leu Ile Glu Pro Leu Arg Ala Thr
 1025 1030 1035 1040
 Cys Thr Ala Lys Val Lys Ala Gly Ser Val Lys Gln Glu Phe Glu Lys
 1045 1050 1055
 Gln Asp Glu Leu Lys Arg Ser Ala Met Arg Ala Val Ala Ala Leu Leu
 1060 1065 1070
 Thr Ile Pro Glu Val Gly Lys Ser Pro Ile Met Ala Asp Phe Ser Ser
 1075 1080 1085
 Gln Ile Arg Ser Asn Pro Glu Leu Ala Ala Leu Phe Glu Ser Ile Gln
 1090 1095 1100
 Lys Asp Ser Thr Ser Ala Pro Ser Thr Asp Ser Met Glu Leu Ser
 1105 1110 1115 1119

<210> 1787

<211> 1144

<212> PRT

<213> Homo sapiens

<400> 1787

Met Ser Thr Ala Ala Phe His Ile Ser Ser Leu Leu Glu Lys Met Thr
 1 5 10 15
 Ser Ser Asp Lys Asp Phe Arg Phe Met Ala Thr Ser Asp Leu Met Ser
 20 25 30
 Glu Leu Gln Lys Asp Ser Ile Gln Leu Asp Glu Asp Ser Glu Arg Lys
 35 40 45
 Val Val Lys Met Leu Leu Arg Leu Leu Glu Asp Lys Asn Gly Glu Val
 50 55 60
 Gln Asn Leu Ala Val Lys Trp Leu Gly Val Pro Leu Gly Ala Phe His
 65 70 75 80
 Ala Ser Leu Leu His Cys Leu Leu Pro Gln Leu Ser Ser Pro Arg Leu
 85 90 95

Ala	Val	Arg	Lys	Arg	Ala	Val	Gly	Ala	Leu	Gly	His	Leu	Ala	Ala	Ala
			100					105					110		
Cys	Ser	Thr	Asp	Leu	Phe	Val	Glu	Leu	Ala	Asp	His	Leu	Leu	Asp	Arg
		115					120					125			
Leu	Pro	Gly	Pro	Arg	Val	Pro	Thr	Ser	Pro	Thr	Ala	Ile	Arg	Thr	Leu
	130					135					140				
Ile	Gln	Cys	Leu	Gly	Ser	Val	Gly	Arg	Gln	Ala	Gly	His	Arg	Leu	Gly
145					150					155					160
Ala	His	Leu	Asp	Arg	Leu	Val	Pro	Leu	Val	Glu	Asp	Phe	Cys	Asn	Leu
			165					170						175	
Asp	Asp	Asp	Glu	Leu	Arg	Glu	Ser	Cys	Leu	Gln	Ala	Phe	Glu	Ala	Phe
		180					185						190		
Leu	Arg	Lys	Cys	Pro	Lys	Glu	Met	Gly	Pro	His	Val	Pro	Asn	Val	Thr
		195					200					205			
Ser	Leu	Cys	Leu	Gln	Tyr	Ile	Lys	His	Asp	Pro	Asn	Tyr	Asn	Tyr	Asp
	210					215					220				
Ser	Asp	Glu	Asp	Glu	Glu	Gln	Met	Glu	Thr	Glu	Asp	Ser	Glu	Phe	Ser
225					230					235					240
Glu	Gln	Glu	Ser	Glu	Asp	Glu	Tyr	Ser	Asp	Asp	Asp	Asp	Met	Ser	Trp
				245					250					255	
Lys	Val	Arg	Arg	Ala	Ala	Ala	Lys	Cys	Ile	Ala	Ala	Leu	Ile	Ser	Ser
			260					265					270		
Arg	Pro	Asp	Leu	Leu	Pro	Asp	Phe	His	Cys	Thr	Leu	Ala	Pro	Val	Leu
		275					280					285			
Ile	Arg	Arg	Phe	Lys	Glu	Arg	Glu	Glu	Asn	Val	Lys	Ala	Asp	Val	Phe
	290					295					300				
Thr	Ala	Tyr	Ile	Val	Leu	Leu	Arg	Gln	Thr	Arg	Pro	Pro	Lys	Gly	Trp
305					310					315					320
Leu	Glu	Ala	Met	Glu	Glu	Pro	Thr	Gln	Thr	Gly	Ser	Asn	Leu	His	Met
				325					330					335	
Leu	Arg	Gly	Gln	Val	Pro	Leu	Val	Val	Lys	Ala	Leu	Gln	Arg	Gln	Leu
			340					345					350		
Lys	Asp	Arg	Ser	Val	Arg	Ala	Arg	Gln	Gly	Cys	Phe	Ser	Leu	Leu	Thr
		355					360					365			
Glu	Leu	Ala	Gly	Val	Leu	Pro	Gly	Ser	Leu	Ala	Glu	His	Met	Pro	Val
	370					375					380				
Leu	Val	Ser	Gly	Ile	Ile	Phe	Ser	Leu	Ala	Asp	Arg	Ser	Ser	Ser	Ser
385					390					395					400
Thr	Ile	Arg	Met	Asp	Ala	Leu	Ala	Phe	Leu	Gln	Gly	Leu	Leu	Gly	Thr
			405					410						415	
Glu	Pro	Ala	Glu	Ala	Phe	His	Pro	His	Leu	Pro	Ile	Leu	Leu	Pro	Pro
			420					425						430	
Val	Met	Ala	Cys	Val	Ala	Asp	Ser	Phe	Tyr	Lys	Ile	Ala	Ala	Glu	Ala
		435					440					445			
Leu	Val	Val	Leu	Gln	Glu	Leu	Val	Arg	Ala	Leu	Trp	Pro	Leu	His	Arg
	450					455					460				
Pro	Arg	Met	Leu	Asp	Pro	Glu	Pro	Tyr	Val	Gly	Glu	Met	Ser	Ala	Val
465					470					475					480
Thr	Leu	Ala	Arg	Leu	Arg	Ala	Thr	Asp	Leu	Asp	Gln	Glu	Val	Lys	Glu
			485					490						495	
Arg	Ala	Ile	Ser	Cys	Met	Gly	His	Leu	Val	Gly	His	Leu	Gly	Asp	Arg
			500					505					510		
Leu	Gly	Asp	Asp	Leu	Glu	Pro	Thr	Leu	Leu	Leu	Leu	Leu	Asp	Arg	Leu
		515					520					525			
Arg	Asn	Glu	Ile	Thr	Arg	Leu	Pro	Ala	Ile	Lys	Ala	Leu	Thr	Leu	Val
	530					535					540				
Ala	Val	Ser	Pro	Leu	Gln	Leu	Asp	Leu	Gln	Pro	Ile	Leu	Ala	Glu	Ala
545					550					555					560
Leu	His	Ile	Leu	Ala	Ser	Phe	Leu	Arg	Lys	Asn	Gln	Arg	Ala	Leu	Arg
			565					570						575	
Leu	Ala	Thr	Leu	Ala	Ala	Leu	Asp	Ala	Leu	Ala	Gln	Ser	Gln	Gly	Leu
			580					585					590		
Ser	Leu	Pro	Pro	Ser	Ala	Val	Gln	Ala	Val	Leu	Ala	Glu	Leu	Pro	Ala
		595					600					605			

Leu	Val	Asn	Glu	Ser	Asp	Met	His	Val	Ala	Gln	Leu	Ala	Val	Asp	Phe
610						615					620				
Leu	Ala	Thr	Val	Thr	Gln	Ala	Gln	Pro	Ala	Ser	Leu	Val	Glu	Val	Ser
625					630					635					640
Gly	Pro	Val	Leu	Ser	Glu	Leu	Leu	Arg	Leu	Leu	Arg	Ser	Pro	Leu	Leu
				645					650						655
Pro	Ala	Gly	Val	Leu	Ala	Ala	Ala	Glu	Gly	Phe	Leu	Gln	Ala	Leu	Val
			660					665					670		
Gly	Thr	Arg	Pro	Pro	Cys	Val	Asp	Tyr	Ala	Lys	Leu	Ile	Ser	Leu	Leu
	675						680					685			
Thr	Ala	Pro	Val	Tyr	Glu	Gln	Ala	Val	Asp	Gly	Gly	Pro	Gly	Leu	His
690					695						700				
Lys	Gln	Val	Phe	His	Ser	Leu	Ala	Arg	Cys	Val	Ala	Ala	Leu	Ser	Ala
705					710					715					720
Ala	Cys	Pro	Gln	Glu	Ala	Ala	Ser	Thr	Ala	Ser	Arg	Leu	Val	Cys	Asp
			725						730						735
Ala	Arg	Ser	Pro	His	Ser	Ser	Thr	Gly	Val	Lys	Val	Leu	Ala	Phe	Leu
			740					745							750
Ser	Leu	Ala	Glu	Val	Gly	Gln	Val	Ala	Gly	Pro	Gly	Pro	Gln	Arg	Glu
	755						760					765			
Leu	Lys	Ala	Val	Leu	Leu	Glu	Ala	Leu	Gly	Ser	Pro	Ser	Glu	Asp	Val
770						775						780			
Arg	Ala	Ala	Ala	Ser	Tyr	Ala	Leu	Gly	Arg	Val	Gly	Ala	Gly	Ser	Leu
785					790					795					800
Pro	Asp	Phe	Leu	Pro	Phe	Leu	Leu	Glu	Gln	Ile	Glu	Ala	Glu	Pro	Arg
			805						810						815
Arg	Gln	Tyr	Leu	Leu	Leu	His	Ser	Leu	Arg	Glu	Ala	Leu	Gly	Ala	Ala
			820					825						830	
Gln	Pro	Asp	Ser	Leu	Lys	Pro	Tyr	Ala	Glu	Asp	Ile	Trp	Ala	Leu	Leu
	835						840						845		
Phe	Gln	Arg	Cys	Glu	Gly	Ala	Glu	Glu	Gly	Thr	Arg	Gly	Val	Val	Ala
850						855					860				
Glu	Cys	Ile	Gly	Lys	Leu	Val	Leu	Val	Asn	Pro	Ser	Phe	Leu	Leu	Pro
865					870					875					880
Arg	Leu	Arg	Lys	Gln	Leu	Ala	Ala	Gly	Arg	Pro	His	Thr	Arg	Ser	Thr
			885						890						895
Val	Ile	Thr	Ala	Val	Lys	Phe	Leu	Ile	Ser	Asp	Gln	Pro	His	Pro	Ile
			900					905						910	
Asp	Pro	Leu	Leu	Lys	Ser	Phe	Ile	Gly	Glu	Phe	Met	Glu	Ser	Leu	Gln
	915						920					925			
Asp	Pro	Asp	Leu	Asn	Val	Arg	Arg	Ala	Thr	Leu	Ala	Phe	Phe	Asn	Ser
	930					935						940			
Ala	Val	His	Asn	Lys	Pro	Ser	Leu	Val	Arg	Asp	Leu	Leu	Asp	Asp	Ile
945					950					955					960
Leu	Pro	Leu	Leu	Tyr	Gln	Glu	Thr	Lys	Ile	Arg	Arg	Asp	Leu	Ile	Arg
			965						970						975
Glu	Val	Glu	Met	Gly	Pro	Phe	Lys	His	Thr	Val	Asp	Asp	Gly	Leu	Asp
			980					985						990	
Val	Arg	Lys	Ala	Ala	Phe	Glu	Cys	Met	Tyr	Ser	Leu	Leu	Glu	Ser	Cys
	995						1000						1005		
Leu	Gly	Gln	Leu	Asp	Ile	Cys	Glu	Phe	Leu	Asn	His	Val	Glu	Asp	Gly
	1010					1015									1020
Leu	Lys	Asp	His	Tyr	Asp	Ile	Arg	Met	Leu	Thr	Phe	Ile	Met	Val	Ala
1025					1030					1035					1040
Arg	Leu	Ala	Thr	Leu	Cys	Pro	Ala	Pro	Val	Leu	Gln	Arg	Val	Asp	Arg
			1045						1050					1055	
Leu	Ile	Glu	Pro	Leu	Arg	Ala	Thr	Cys	Thr	Ala	Lys	Val	Lys	Ala	Gly
			1060					1065						1070	
Ser	Val	Lys	Gln	Glu	Phe	Glu	Lys	Gln	Asp	Glu	Leu	Lys	Arg	Ser	Ala
	1075						1080						1085		
Met	Arg	Ala	Val	Ala	Ala	Leu	Leu	Thr	Ile	Pro	Glu	Val	Gly	Lys	Ser
	1090					1095									1100
Pro	Ile	Met	Ala	Asp	Phe	Ser	Ser	Gln	Ile	Arg	Ser	Asn	Pro	Glu	Leu
1105					1110					1115					1120

Ala Ala Leu Phe Glu Ser Ile Gln Lys Asp Ser Thr Ser Ala Pro Ser
 1125 1130 1135
 Thr Asp Ser Met Glu Leu Ser *
 1140 1143

<210> 1788
 <211> 393
 <212> PRT
 <213> Homo sapiens

<400> 1788
 Met Ile Thr Leu Ile Thr Glu Gln Leu Gln Lys Gln Thr Leu Asp Glu
 1 5 10 15
 Leu Lys Cys Thr Arg Phe Ser Ile Ser Leu Pro Leu Pro Asp His Ala
 20 25 30
 Asp Ile Ser Asn Cys Gly Asn Ser Phe Gln Leu Val Ser Glu Gly Ala
 35 40 45
 Ser Trp Arg Gly Leu Pro His Cys Ser Cys Ala Glu Phe Gln Asp Ser
 50 55 60
 Leu Asn Phe Ser Tyr His Pro Ser Gly Leu Ser Leu His Leu Arg Pro
 65 70 75 80
 Pro Ser Arg Gly Asn Ser Pro Lys Glu Gln Pro Phe Ser Gln Val Leu
 85 90 95
 Arg Pro Glu Pro Pro Asp Pro Glu Lys Leu Pro Val Pro Pro Ala Pro
 100 105 110
 Pro Ser Lys Arg His Cys Arg Ser Leu Ser Val Pro Val Asp Leu Ser
 115 120 125
 Arg Trp Gln Pro Val Trp Arg Pro Ala Pro Ser Lys Leu Trp Thr Pro
 130 135 140
 Ile Lys His Arg Gly Ser Gly Gly Gly Gly Gly Pro Gln Val Pro His
 145 150 155 160
 Gln Ser Pro Pro Lys Arg Val Ser Ser Leu Arg Phe Leu Gln Ala Pro
 165 170 175
 Ser Ala Ser Ser Gln Cys Ala Pro Ala His Arg Pro Tyr Ser Pro Pro
 180 185 190
 Phe Phe Ser Leu Ala Leu Ala Gln Asp Ser Ser Arg Pro Cys Ala Ala
 195 200 205
 Ser Pro Gln Ser Gly Ser Trp Glu Ser Asp Ala Glu Ser Leu Ser Pro
 210 215 220
 Cys Pro Pro Gln Arg Arg Phe Ser Leu Ser Pro Ser Leu Gly Pro Gln
 225 230 235 240
 Ala Ser Arg Phe Leu Pro Ser Ala Arg Ser Ser Pro Ala Ser Ser Pro
 245 250 255
 Glu Leu Pro Trp Arg Pro Arg Gly Leu Arg Asn Leu Pro Arg Ser Arg
 260 265 270
 Ser Gln Pro Cys Asp Leu Asp Ala Arg Lys Thr Gly Val Lys Arg Arg
 275 280 285
 His Glu Glu Asp Pro Arg Arg Leu Arg Pro Ser Leu Asp Phe Asp Lys
 290 295 300
 Met Asn Gln Lys Pro Tyr Ser Gly Gly Leu Cys Leu Gln Glu Thr Ala
 305 310 315 320
 Arg Glu Gly Ser Ser Ile Ser Pro Pro Trp Phe Met Ala Cys Ser Pro
 325 330 335
 Pro Pro Leu Ser Ala Ser Cys Ser Pro Thr Gly Gly Ser Ser Gln Val
 340 345 350
 Leu Ser Glu Ser Glu Glu Glu Glu Glu Gly Ala Val Arg Trp Gly Arg
 355 360 365
 Gln Ala Leu Ser Lys Arg Thr Leu Cys Gln Arg Asp Phe Gly Asp Leu
 370 375 380
 Asp Leu Asn Leu Ile Glu Glu Asn *
 385 390 392

<210> 1789
 <211> 543
 <212> PRT
 <213> Homo sapiens

<400> 1789
 Met Glu Pro Asp Ser Val Ile Glu Asp Lys Thr Ile Glu Leu Met Cys
 1 5 10 15
 Ser Val Pro Arg Ser Leu Trp Leu Gly Cys Ala Asn Leu Val Glu Ser
 20 25 30
 Met Cys Ala Leu Ser Cys Leu Gln Ser Met Pro Ser Val Arg Cys Leu
 35 40 45
 Gln Ile Ser Asn Gly Thr Ser Ser Val Ile Val Ser Arg Lys Arg Pro
 50 55 60
 Ser Glu Gly Asn Tyr Gln Lys Glu Lys Asp Leu Cys Ile Lys Tyr Phe
 65 70 75 80
 Asp Gln Trp Ser Glu Ser Asp Gln Val Glu Phe Val Glu His Leu Ile
 85 90 95
 Ser Arg Met Cys His Tyr Gln His Gly His Ile Asn Ser Tyr Leu Lys
 100 105 110
 Pro Met Leu Gln Arg Asp Phe Ile Thr Ala Leu Pro Glu Gln Gly Leu
 115 120 125
 Asp His Ile Ala Glu Asn Ile Leu Ser Tyr Leu Asp Ala Arg Ser Leu
 130 135 140
 Cys Ala Ala Glu Leu Val Cys Lys Glu Trp Gln Arg Val Ile Ser Glu
 145 150 155 160
 Gly Met Leu Trp Lys Lys Leu Ile Glu Arg Met Val Arg Thr Asp Pro
 165 170 175
 Leu Trp Lys Gly Leu Ser Glu Arg Arg Gly Trp Asp Gln Tyr Leu Phe
 180 185 190
 Lys Asn Arg Pro Thr Asp Gly Pro Pro Asn Ser Phe Tyr Arg Ser Leu
 195 200 205
 Tyr Pro Lys Ile Ile Gln Asp Ile Glu Thr Ile Glu Ser Asn Trp Arg
 210 215 220
 Cys Gly Arg His Asn Leu Gln Arg Ile Gln Cys Arg Ser Glu Asn Ser
 225 230 235 240
 Lys Gly Val Tyr Cys Leu Gln Tyr Asp Asp Glu Lys Ile Ile Ser Gly
 245 250 255
 Leu Arg Asp Asn Ser Ile Lys Ile Trp Asp Lys Thr Ser Leu Glu Cys
 260 265 270
 Leu Lys Val Leu Thr Gly His Thr Gly Ser Val Leu Cys Leu Gln Tyr
 275 280 285
 Asp Glu Arg Val Ile Val Thr Gly Ser Ser Asp Ser Thr Val Arg Val
 290 295 300
 Trp Asp Val Asn Thr Gly Glu Val Leu Asn Thr Leu Ile His His Asn
 305 310 315 320
 Glu Ala Val Leu His Leu Arg Phe Ser Asn Gly Leu Met Val Thr Cys
 325 330 335
 Ser Lys Asp Arg Ser Ile Ala Val Trp Asp Met Ala Ser Ala Thr Asp
 340 345 350
 Ile Thr Leu Arg Arg Val Leu Val Gly His Arg Ala Ala Val Asn Val
 355 360 365
 Val Asp Phe Asp Asp Lys Tyr Ile Val Ser Ala Ser Gly Asp Arg Thr
 370 375 380
 Ile Lys Val Trp Ser Thr Ser Thr Cys Glu Phe Val Arg Thr Leu Asn
 385 390 395 400
 Gly His Lys Arg Gly Ile Ala Cys Leu Gln Tyr Arg Asp Arg Leu Val
 405 410 415
 Val Ser Gly Ser Ser Asp Asn Thr Ile Arg Leu Trp Asp Ile Glu Cys
 420 425 430

Gly	Ala	Cys	Leu	Arg	Val	Leu	Glu	Gly	His	Glu	Glu	Leu	Val	Arg	Cys
		435					440					445			
Ile	Arg	Phe	Asp	Asn	Lys	Arg	Ile	Val	Ser	Gly	Ala	Tyr	Asp	Gly	Lys
	450					455					460				
Ile	Lys	Val	Trp	Asp	Leu	Gln	Ala	Ala	Leu	Asp	Pro	Arg	Ala	Pro	Ala
465					470					475					480
Ser	Thr	Leu	Cys	Leu	Arg	Thr	Leu	Val	Glu	His	Ser	Gly	Arg	Val	Phe
			485						490					495	
Arg	Leu	Gln	Phe	Asp	Glu	Phe	Gln	Ile	Ile	Ser	Ser	Ser	His	Asp	Asp
		500					505						510		
Thr	Ile	Leu	Ile	Trp	Asp	Phe	Leu	Asn	Val	Pro	Pro	Ser	Ala	Gln	Asn
	515						520					525			
Glu	Thr	Arg	Ser	Pro	Ser	Arg	Thr	Tyr	Thr	Tyr	Ile	Ser	Arg	*	
530						535					540		542		

<210> 1790

<211> 944

<212> PRT

<213> Homo sapiens

<400> 1790

Met	Asp	Gly	Ser	Thr	Glu	Arg	Leu	Glu	Ala	Arg	Arg	Pro	Ala	Gly	Arg
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Leu	Pro	Trp	Ser	Ser	Arg	Gln	Glu	Met	Thr	Arg	Arg	Pro	Ser	Leu	Met
			20					25					30		
Ala	Gly	Arg	Gln	His	Gly	Trp	Ser	Ala	Gln	Gln	Ser	Ala	Thr	Val	Ala
	35					40						45			
Asn	Pro	Val	Pro	Gly	Ala	Asn	Pro	Asp	Leu	Leu	Pro	His	Phe	Leu	Val
50					55						60				
Glu	Pro	Glu	Asp	Val	Tyr	Ile	Val	Lys	Asn	Lys	Pro	Val	Leu	Leu	Val
65				70						75					80
Cys	Lys	Ala	Val	Pro	Ala	Thr	Gln	Ile	Phe	Phe	Lys	Cys	Asn	Gly	Glu
			85						90					95	
Trp	Val	Arg	Gln	Val	Asp	His	Val	Ile	Glu	Arg	Ser	Thr	Asp	Gly	Ser
			100					105					110		
Ser	Gly	Leu	Pro	Thr	Met	Glu	Val	Arg	Ile	Asn	Val	Ser	Arg	Gln	Gln
	115					120						125			
Val	Glu	Lys	Val	Phe	Gly	Leu	Glu	Glu	Tyr	Trp	Cys	Gln	Cys	Val	Ala
130					135						140				
Trp	Ser	Ser	Ser	Gly	Thr	Thr	Lys	Ser	Gln	Lys	Ala	Tyr	Ile	Arg	Ile
145				150						155					160
Ala	Tyr	Leu	Arg	Lys	Asn	Phe	Glu	Gln	Glu	Pro	Leu	Ala	Lys	Glu	Val
			165						170					175	
Ser	Leu	Glu	Gln	Gly	Ile	Val	Leu	Pro	Cys	Arg	Pro	Pro	Glu	Gly	Ile
		180						185					190		
Pro	Pro	Ala	Glu	Val	Glu	Trp	Leu	Arg	Asn	Glu	Asp	Leu	Val	Asp	Pro
	195					200					205				
Ser	Leu	Asp	Pro	Asn	Val	Tyr	Ile	Thr	Arg	Glu	His	Ser	Leu	Val	Val
210					215						220				
Arg	Gln	Ala	Arg	Leu	Ala	Asp	Thr	Ala	Asn	Tyr	Thr	Cys	Val	Ala	Lys
225				230						235					240
Asn	Ile	Val	Ala	Arg	Arg	Ser	Ala	Ser	Ala	Ala	Val	Ile	Val	Tyr	
			245						250					255	
Gly	Gly	Pro	Arg	Asp	Ser	Leu	Val	Thr	Gly	Arg	Gly	Thr	Ala	Val	Pro
		260						265					270		
Leu	Gly	Ser	Asp	Met	Trp	Leu	Ser	Phe	Ser	Val	Arg	Pro	Val	Asn	Gly
	275					280						285			
Gly	Trp	Ser	Thr	Trp	Thr	Glu	Trp	Ser	Val	Cys	Ser	Ala	Ser	Cys	Gly
290					295						300				
Arg	Gly	Trp	Gln	Lys	Arg	Ser	Arg	Ser	Cys	Thr	Asn	Pro	Ala	Pro	Leu
305					310					315					320

3665

Phe	Ala	Glu	Leu	Leu	Ala	Leu	Glu	Ser	Glu	Ala	Gly	Val	Pro	Ala	Leu
		835					840					845			
Val	Gly	Pro	Ser	Ala	Phe	Lys	Ile	Pro	Phe	Leu	Ile	Arg	Gln	Lys	Ile
	850					855					860				
Ile	Ser	Ser	Leu	Asp	Pro	Pro	Cys	Arg	Arg	Gly	Ala	Asp	Trp	Arg	Thr
865					870					875					880
Leu	Ala	Gln	Lys	Leu	His	Leu	Asp	Ser	His	Leu	Ser	Phe	Phe	Ala	Ser
				885					890					895	
Lys	Pro	Ser	Pro	Thr	Ala	Met	Ile	Leu	Asn	Leu	Trp	Glu	Ala	Arg	His
			900					905					910		
Phe	Pro	Asn	Gly	Asn	Leu	Ser	Gln	Leu	Ala	Ala	Ala	Val	Ala	Gly	Leu
		915					920					925			
Gly	Gln	Pro	Asp	Ala	Gly	Leu	Phe	Thr	Val	Ser	Glu	Ala	Glu	Cys	*
	930					935					940			943	

<210> 1791

<211> 1004

<212> PRT

<213> Homo sapiens

<400> 1791

Met	Arg	Lys	Phe	Asn	Ile	Arg	Lys	Val	Leu	Asp	Gly	Leu	Thr	Ala	Gly
1				5					10					15	
Ser	Ser	Ser	Ala	Ser	Gln	Gln	Gln	Gln	Gln	Gln	His	Pro	Pro	Gly	Asn
			20					25					30		
Arg	Glu	Pro	Glu	Ile	Gln	Glu	Thr	Leu	Gln	Ser	Glu	His	Phe	Gln	Leu
		35					40					45			
Cys	Lys	Thr	Val	Arg	His	Gly	Phe	Pro	Tyr	Gln	Pro	Ser	Ala	Leu	Ala
	50					55				60					
Phe	Asp	Pro	Val	Gln	Lys	Ile	Leu	Ala	Val	Gly	Thr	Gln	Thr	Gly	Ala
65					70					75					80
Leu	Arg	Leu	Phe	Gly	Arg	Pro	Gly	Val	Glu	Cys	Tyr	Cys	Gln	His	Asp
				85					90					95	
Ser	Gly	Ala	Ala	Val	Ile	Gln	Leu	Gln	Phe	Leu	Ile	Asn	Glu	Gly	Ala
		100						105					110		
Leu	Val	Ser	Ala	Leu	Ala	Asp	Asp	Thr	Leu	His	Leu	Trp	Asn	Leu	Arg
		115					120					125			
Gln	Lys	Arg	Pro	Ala	Ile	Leu	His	Ser	Leu	Lys	Phe	Cys	Arg	Glu	Arg
	130					135					140				
Val	Thr	Phe	Cys	His	Leu	Pro	Phe	Gln	Ser	Lys	Trp	Leu	Tyr	Val	Gly
145					150					155					160
Thr	Glu	Arg	Gly	Asn	Ile	His	Ile	Val	Asn	Val	Glu	Ser	Phe	Thr	Leu
			165					170						175	
Ser	Gly	Tyr	Val	Ile	Met	Trp	Asn	Lys	Ala	Ile	Glu	Leu	Ser	Ser	Lys
		180					185						190		
Ser	His	Pro	Gly	Pro	Val	Val	His	Ile	Ser	Asp	Asn	Pro	Met	Asp	Glu
		195					200					205			
Gly	Lys	Leu	Leu	Ile	Gly	Phe	Glu	Ser	Gly	Thr	Val	Val	Leu	Trp	Asp
	210					215					220				
Leu	Lys	Tyr	Lys	Lys	Ala	Asp	Tyr	Arg	Tyr	Thr	Tyr	Asp	Glu	Ala	Ile
225					230					235					240
His	Ser	Val	Ala	Trp	His	His	Glu	Gly	Lys	Gln	Phe	Ile	Cys	Ser	His
				245					250					255	
Ser	Asp	Gly	Thr	Leu	Thr	Ile	Trp	Asn	Val	Arg	Ser	Pro	Ala	Lys	Pro
		260						265					270		
Val	Gln	Thr	Ile	Thr	Pro	His	Gly	Lys	Gln	Leu	Arg	Asp	Gly	Lys	Lys
		275					280					285			
Pro	Glu	Pro	Cys	Lys	Pro	Ile	Leu	Lys	Val	Glu	Phe	Lys	Thr	Thr	Arg
	290					295					300				
Ser	Gly	Glu	Pro	Phe	Ile	Ile	Leu	Ser	Gly	Gly	Leu	Ser	Tyr	Asp	Thr
305					310					315					320

Val	Gly	Arg	Arg	Pro	Cys	Leu	Thr	Val	Met	His	Gly	Lys	Ser	Thr	Ala	
				325					330					335		
Val	Leu	Glu	Met	Asp	Tyr	Ser	Ile	Val	Asp	Phe	Leu	Thr	Leu	Cys	Glu	
			340					345					350			
Thr	Pro	Tyr	Pro	Asn	Asp	Phe	Gln	Glu	Pro	Tyr	Ala	Val	Val	Val	Leu	
		355					360					365				
Leu	Glu	Lys	Asp	Leu	Val	Leu	Ile	Asp	Leu	Ala	Gln	Asn	Gly	Tyr	Pro	
	370					375					380					
Ile	Phe	Glu	Asn	Pro	Tyr	Pro	Leu	Ser	Ile	His	Glu	Ser	Pro	Val	Thr	
385					390					395					400	
Cys	Cys	Glu	Tyr	Phe	Ala	Asp	Cys	Pro	Val	Asp	Leu	Ile	Pro	Ala	Leu	
				405					410					415		
Tyr	Ser	Val	Gly	Ala	Arg	Gln	Lys	Arg	Gln	Gly	Tyr	Ser	Lys	Lys	Glu	
			420					425					430			
Trp	Pro	Ile	Asn	Gly	Gly	Asn	Trp	Gly	Leu	Gly	Ala	Gln	Ser	Tyr	Pro	
		435					440					445				
Glu	Ile	Ile	Ile	Thr	Gly	His	Ala	Asp	Gly	Ser	Val	Lys	Phe	Trp	Asp	
	450					455					460					
Ala	Ser	Ala	Ile	Thr	Leu	Gln	Val	Leu	Tyr	Lys	Leu	Lys	Thr	Ser	Lys	
465					470					475					480	
Val	Phe	Glu	Lys	Ser	Arg	Asn	Lys	Asp	Asp	Arg	Pro	Asn	Thr	Asp	Ile	
				485					490					495		
Val	Asp	Glu	Asp	Pro	Tyr	Ala	Ile	Gln	Ile	Ile	Ser	Trp	Cys	Pro	Glu	
			500					505					510			
Ser	Arg	Met	Leu	Cys	Ile	Ala	Gly	Val	Ser	Ala	His	Val	Ile	Ile	Tyr	
		515					520					525				
Arg	Phe	Ser	Lys	Gln	Glu	Val	Ile	Thr	Glu	Val	Ile	Pro	Met	Leu	Glu	
	530					535					540					
Val	Arg	Leu	Leu	Tyr	Glu	Ile	Asn	Asp	Val	Glu	Thr	Pro	Glu	Gly	Glu	
545					550					555					560	
Gln	Pro	Pro	Pro	Leu	Pro	Thr	Pro	Val	Gly	Gly	Ser	Asn	Pro	Gln	Pro	
				565					570					575		
Ile	Pro	Pro	Gln	Ser	His	Pro	Ser	Thr	Ser	Ser	Ser	Ser	Ser	Asp	Gly	
			580					585						590		
Leu	Arg	Asp	Asn	Val	Pro	Cys	Leu	Asn	Val	Val	Cys	Lys	Glu	His	Gly	
		595					600					605				
Asn	His	Phe	Ile	Leu	Thr	Arg	Ser	Lys	Lys	Leu	Asn	Lys	Leu	Glu	Asn	
	610					615					620					
Gln	Gln	Leu	Phe	Leu	Lys	Ile	Cys	Lys	Arg	Arg	Leu	Pro	Ser	Glu	Ile	
625					630					635					640	
Thr	Leu	Leu	Arg	Glu	Pro	Asn	Leu	Leu	Gly	Phe	Tyr	Gln	Gly	Pro	Thr	
				645					650					655		
Asn	Leu	Arg	Glu	Glu	Lys	Ser	Leu	Gln	Trp	Ala	Gln	Ala	Phe	Gln	Val	
			660					665					670			
Lys	Glu	Glu	Lys	Tyr	Ala	Thr	Pro	Ala	His	Phe	Ser	His	Leu	Ile	Pro	
		675					680					685				
Pro	Lys	Arg	Glu	Trp	Glu	Glu	Val	Lys	Glu	Pro	Val	Glu	Phe	Glu	Ile	
	690					695						700				
Ile	Asn	Leu	Lys	Leu	Phe	Glu	Ile	Tyr	Ile	Ser	Thr	Pro	Lys	Asn	Glu	
705					710					715					720	
Ile	Leu	Lys	Tyr	Lys	Ser	Asn	Lys	Tyr	Val	Gln	Asp	Leu	His	Glu	Glu	
				725					730					735		
Gln	His	Lys	Thr	Leu	Gln	Ser	Glu	Asn	Ile	Leu	Tyr	Asp	Ile	Ile	Met	
			740					745					750			
Met	Lys	Asp	Met	Val	Thr	Phe	Cys	His	Leu	Pro	Phe	Gln	Ser	Lys	Trp	
		755					760					765				
Leu	Tyr	Val	Gly	Thr	Glu	Arg	Gly	Asn	Ile	His	Ile	Val	Asn	Val	Glu	
	770					775					780					
Ser	Phe	Thr	Leu	Ser	Gly	Tyr	Val	Ile	Met	Trp	Asn	Lys	Ala	Ile	Glu	
785					790					795					800	
Leu	Ser	Ser	Lys	Ser	His	Pro	Gly	Pro	Val	Val	His	Ile	Ser	Asp	Asn	
				805					810					815		
Pro	Met	Asp	Glu	Gly	Lys	Leu	Leu	Ile	Gly	Phe	Glu	Ser	Gly	Thr	Val	
			820					825						830		

Val	Leu	Trp	Asp	Leu	Lys	Ser	Lys	Lys	Ala	Asp	Tyr	Arg	Tyr	Thr	Tyr
	835						840					845			
Asp	Glu	Ala	Ile	His	Ser	Val	Ala	Trp	His	His	Glu	Gly	Lys	Gln	Phe
	850					855					860				
Ile	Cys	Ser	His	Ser	Asp	Gly	Thr	Leu	Thr	Ile	Trp	Asn	Val	Arg	Ser
865					870					875					880
Pro	Ala	Lys	Pro	Val	Gln	Thr	Ile	Thr	Pro	His	Gly	Lys	Gln	Leu	Lys
				885					890					895	
Asp	Gly	Lys	Lys	Pro	Glu	Pro	Cys	Lys	Pro	Ile	Leu	Lys	Val	Glu	Phe
			900					905					910		
Lys	Thr	Thr	Arg	Ser	Gly	Glu	Pro	Phe	Ile	Ile	Leu	Ser	Gly	Gly	Leu
	915						920					925			
Ser	Tyr	Asp	Thr	Val	Gly	Arg	Arg	Pro	Cys	Leu	Thr	Val	Met	His	Gly
930						935					940				
Lys	Ser	Thr	Ala	Val	Leu	Glu	Met	Asp	Tyr	Ser	Ile	Val	Asp	Phe	Leu
945					950					955					960
Thr	Leu	Cys	Glu	Thr	Pro	Tyr	Pro	Asn	Asp	Phe	Gln	Glu	Pro	Tyr	Ala
			965					970						975	
Val	Val	Val	Leu	Leu	Glu	Lys	Asp	Leu	Val	Leu	Ile	Asp	Leu	Ala	Gln
			980					985					990		
Asn	Gly	Tyr	Pro	Ile	Phe	Glu	Ile	Pro	Thr	Leu	*				
	995					1000			1003						

<210> 1792

<211> 1750

<212> PRT

<213> Homo sapiens

<400> 1792

Met	His	Leu	Lys	His	Leu	Arg	Thr	Leu	Leu	Ser	Pro	Gln	Asp	Gly	Ala
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Ala	Lys	Val	Thr	Cys	Met	Ala	Trp	Ser	Gln	Asn	Asn	Ala	Lys	Phe	Ala
		20						25					30		
Val	Cys	Thr	Val	Asp	Arg	Val	Val	Leu	Leu	Tyr	Asp	Glu	His	Gly	Glu
	35					40						45			
Arg	Arg	Asp	Lys	Phe	Ser	Thr	Lys	Pro	Ala	Asp	Met	Lys	Tyr	Gly	Arg
	50					55				60					
Lys	Ser	Tyr	Met	Val	Lys	Gly	Met	Ala	Phe	Ser	Pro	Asp	Ser	Thr	Lys
65					70					75					80
Ile	Ala	Ile	Gly	Gln	Thr	Asp	Asn	Ile	Ile	Tyr	Val	Tyr	Lys	Ile	Gly
			85					90					95		
Glu	Asp	Trp	Gly	Asp	Lys	Lys	Val	Ile	Cys	Asn	Lys	Phe	Ile	Gln	Thr
		100					105					110			
Ser	Ala	Val	Thr	Cys	Leu	Gln	Trp	Pro	Ala	Glu	Tyr	Ile	Ile	Val	Phe
	115					120						125			
Gly	Leu	Ala	Glu	Gly	Lys	Val	Arg	Leu	Ala	Asn	Thr	Lys	Thr	Asn	Lys
	130					135				140					
Ser	Ser	Thr	Ile	Tyr	Gly	Thr	Glu	Ser	Tyr	Val	Val	Ser	Leu	Thr	Thr
145					150					155					160
Asn	Cys	Ser	Gly	Lys	Gly	Ile	Leu	Ser	Gly	His	Ala	Asp	Gly	Thr	Ile
			165					170					175		
Val	Arg	Tyr	Phe	Phe	Asp	Asp	Glu	Gly	Ser	Gly	Glu	Ser	Gln	Glu	Lys
		180						185					190		
Leu	Val	Asn	His	Pro	Cys	Pro	Pro	Tyr	Ala	Leu	Ala	Trp	Ala	Thr	Asn
	195					200						205			
Ser	Ile	Val	Ala	Ala	Gly	Cys	Asp	Arg	Lys	Ile	Val	Ala	Tyr	Gly	Lys
	210					215						220			
Glu	Gly	His	Met	Leu	Gln	Thr	Phe	Asp	Tyr	Ser	Arg	Asp	Pro	Gln	Glu
225					230					235					240
Arg	Glu	Phe	Thr	Thr	Ala	Val	Ser	Ser	Pro	Gly	Gly	Gln	Ser	Val	Val
			245						250					255	

Leu	Gly	Ser	Tyr	Asp	Arg	Leu	Arg	Val	Phe	Asn	Trp	Ile	Pro	Arg	Arg	
			260					265					270			
Ser	Ile	Trp	Glu	Glu	Ala	Lys	Pro	Lys	Glu	Ile	Thr	Asn	Leu	Tyr	Thr	
		275					280					285				
Ile	Thr	Ala	Leu	Ala	Trp	Lys	Arg	Asp	Gly	Ser	Arg	Leu	Cys	Val	Gly	
	290					295					300					
Thr	Leu	Cys	Gly	Gly	Val	Glu	Gln	Phe	Asp	Cys	Cys	Leu	Arg	Arg	Ser	
305					310					315					320	
Ile	Tyr	Lys	Asn	Lys	Phe	Glu	Leu	Thr	Tyr	Val	Gly	Pro	Ser	Gln	Val	
			325						330					335		
Ile	Val	Lys	Asn	Leu	Ser	Ser	Gly	Thr	Arg	Val	Val	Leu	Lys	Ser	His	
			340					345					350			
Tyr	Gly	Tyr	Glu	Val	Glu	Glu	Val	Lys	Ile	Leu	Gly	Lys	Glu	Arg	Tyr	
		355					360					365				
Leu	Val	Ala	His	Thr	Ser	Glu	Thr	Leu	Leu	Leu	Gly	Asp	Leu	Asn	Thr	
	370					375					380					
Asn	Arg	Leu	Ser	Glu	Ile	Ala	Trp	Gln	Gly	Ser	Gly	Gly	Asn	Glu	Lys	
385					390					395					400	
Tyr	Phe	Phe	Glu	Asn	Glu	Asn	Val	Cys	Met	Ile	Phe	Asn	Ala	Gly	Glu	
				405					410					415		
Leu	Thr	Leu	Val	Glu	Tyr	Gly	Asn	Asn	Asp	Thr	Leu	Gly	Ser	Val	Arg	
			420					425					430			
Thr	Glu	Phe	Met	Asn	Pro	His	Leu	Ile	Ser	Val	Arg	Ile	Asn	Glu	Arg	
		435					440					445				
Cys	Gln	Arg	Gly	Thr	Glu	Asp	Asn	Lys	Lys	Leu	Ala	Tyr	Leu	Ile	Asp	
	450					455					460					
Ile	Lys	Thr	Ile	Ala	Ile	Val	Asp	Leu	Ile	Gly	Gly	Tyr	Asn	Ile	Gly	
465					470					475					480	
Thr	Val	Ser	His	Glu	Ser	Arg	Val	Asp	Trp	Leu	Glu	Leu	Asn	Glu	Thr	
				485					490					495		
Gly	His	Lys	Leu	Leu	Phe	Arg	Asp	Arg	Lys	Leu	Arg	Leu	His	Leu	Tyr	
			500					505					510			
Asp	Ile	Glu	Ser	Cys	Ser	Lys	Thr	Met	Ile	Leu	Asn	Phe	Cys	Ser	Tyr	
		515					520					525				
Met	Gln	Trp	Val	Pro	Gly	Ser	Asp	Val	Leu	Val	Ala	Gln	Asn	Arg	Asn	
	530					535					540					
Ser	Leu	Cys	Val	Trp	Tyr	Asn	Ile	Glu	Ala	Pro	Glu	Arg	Val	Thr	Met	
545					550					555					560	
Phe	Thr	Ile	Arg	Gly	Asp	Val	Ile	Gly	Leu	Glu	Arg	Gly	Gly	Gly	Lys	
				565					570					575		
Thr	Glu	Val	Met	Val	Met	Glu	Gly	Val	Thr	Thr	Val	Ala	Tyr	Thr	Leu	
			580					585					590			
Asp	Glu	Gly	Leu	Ile	Glu	Phe	Gly	Thr	Ala	Ile	Asp	Asp	Gly	Asn	Tyr	
		595					600					605				
Ile	Arg	Ala	Thr	Ala	Phe	Leu	Glu	Thr	Leu	Glu	Met	Thr	Pro	Glu	Thr	
	610					615					620					
Glu	Ala	Met	Trp	Lys	Thr	Leu	Ser	Lys	Leu	Ala	Leu	Glu	Ala	Arg	Gln	
625					630					635					640	
Leu	His	Ile	Ala	Glu	Arg	Cys	Phe	Ser	Ala	Leu	Gly	Gln	Val	Ala	Lys	
				645					650					655		
Ala	Arg	Phe	Leu	His	Glu	Thr	Asn	Glu	Ile	Ala	Asp	Gln	Val	Ser	Arg	
			660					665					670			
Glu	Tyr	Gly	Gly	Glu	Gly	Thr	Asp	Phe	Tyr	Gln	Val	Arg	Ala	Arg	Leu	
		675					680					685				
Ala	Met	Leu	Glu	Lys	Asn	Tyr	Lys	Leu	Ala	Glu	Met	Ile	Phe	Leu	Glu	
	690					695					700					
Gln	Asn	Ala	Val	Glu	Glu	Ala	Met	Gly	Met	Tyr	Gln	Glu	Leu	His	Arg	
705					710					715					720	
Trp	Asp	Glu	Cys	Ile	Ala	Val	Ala	Glu	Ala	Lys	Gly	His	Pro	Ala	Leu	
				725					730					735		
Glu	Lys	Leu	Arg	Arg	Ser	Tyr	Tyr	Gln	Trp	Leu	Met	Asp	Thr	Gln	Gln	
			740					745					750			
Glu	Glu	Arg	Ala	Gly	Glu	Leu	Gln	Glu	Ser	Gln	Gly	Asp	Gly	Leu	Ala	
		755					760					765				

Ala	Ile	Ser	Leu	Tyr	Leu	Lys	Ala	Gly	Leu	Pro	Ala	Lys	Ala	Ala	Arg
770						775					780				
Leu	Val	Leu	Thr	Arg	Glu	Glu	Leu	Leu	Ala	Asn	Thr	Glu	Leu	Val	Glu
785					790					795					800
His	Ile	Thr	Ala	Ala	Leu	Ile	Lys	Gly	Glu	Leu	Tyr	Glu	Arg	Ala	Gly
			805						810					815	
Asp	Leu	Phe	Glu	Lys	Ile	His	Asn	Pro	Gln	Lys	Ala	Leu	Glu	Cys	Tyr
			820					825					830		
Arg	Lys	Gly	Asn	Ala	Phe	Met	Lys	Ala	Val	Glu	Leu	Ala	Arg	Leu	Ala
		835					840					845			
Phe	Pro	Val	Glu	Val	Val	Lys	Leu	Glu	Glu	Ala	Trp	Gly	Asp	His	Leu
850						855					860				
Val	Gln	Gln	Lys	Gln	Leu	Asp	Ala	Ala	Ile	Asn	His	Tyr	Ile	Glu	Ala
865					870					875					880
Arg	Cys	Ser	Ile	Lys	Ala	Ile	Glu	Ala	Ala	Leu	Gly	Ala	Arg	Gln	Trp
			885						890					895	
Lys	Lys	Ala	Ile	Tyr	Ile	Leu	Asp	Leu	Gln	Asp	Arg	Asn	Thr	Ala	Ser
		900						905					910		
Lys	Tyr	Tyr	Pro	Leu	Val	Ala	Gln	His	Tyr	Ala	Ser	Leu	Gln	Glu	Tyr
		915					920						925		
Glu	Ile	Ala	Glu	Glu	Leu	Tyr	Thr	Lys	Gly	Asp	Arg	Thr	Lys	Asp	Ala
930						935					940				
Ile	Asp	Met	Tyr	Thr	Gln	Ala	Gly	Arg	Trp	Glu	Gln	Ala	His	Lys	Leu
945					950					955					960
Ala	Met	Lys	Cys	Met	Arg	Pro	Glu	Asp	Val	Ser	Val	Leu	Tyr	Ile	Thr
			965						970					975	
Gln	Ala	Gln	Glu	Met	Glu	Lys	Gln	Gly	Lys	Tyr	Arg	Glu	Ala	Glu	Arg
			980					985					990		
Leu	Tyr	Val	Thr	Val	Gln	Glu	Pro	Asp	Leu	Ala	Ile	Thr	Met	Tyr	Lys
		995					1000						1005		
Lys	His	Lys	Leu	Tyr	Asp	Asp	Met	Ile	Arg	Leu	Val	Gly	Lys	His	His
1010					1015						1020				
Pro	Asp	Leu	Leu	Ser	Asp	Thr	His	Leu	His	Leu	Gly	Lys	Glu	Leu	Glu
1025					1030					1035					1040
Ala	Glu	Gly	Arg	Leu	Gln	Glu	Ala	Glu	Tyr	His	Tyr	Leu	Glu	Ala	Gln
			1045						1050					1055	
Glu	Trp	Lys	Ala	Thr	Val	Asn	Met	Tyr	Arg	Ala	Ser	Gly	Leu	Trp	Glu
		1060						1065					1070		
Glu	Ala	Tyr	Arg	Val	Ala	Arg	Thr	Gln	Gly	Gly	Ala	Asn	Ala	His	Lys
		1075					1080					1085			
His	Val	Ala	Tyr	Leu	Trp	Ala	Lys	Ser	Leu	Gly	Gly	Glu	Ala	Ala	Val
1090					1095							1100			
Arg	Leu	Leu	Asn	Lys	Leu	Gly	Leu	Leu	Glu	Ala	Ala	Val	Asp	His	Ala
1105				1110						1115					1120
Ala	Asp	Asn	Cys	Ser	Phe	Glu	Phe	Ala	Phe	Glu	Leu	Ser	Arg	Leu	Ala
			1125						1130					1135	
Leu	Lys	His	Lys	Thr	Pro	Glu	Val	His	Leu	Lys	Tyr	Ala	Met	Phe	Leu
		1140						1145					1150		
Glu	Asp	Glu	Gly	Lys	Phe	Glu	Glu	Ala	Glu	Ala	Glu	Phe	Ile	Arg	Ala
		1155					1160					1165			
Gly	Lys	Pro	Lys	Glu	Ala	Val	Leu	Met	Phe	Val	His	Asn	Gln	Asp	Trp
1170					1175							1180			
Glu	Ala	Ala	Gln	Arg	Val	Ala	Glu	Ala	His	Asp	Pro	Asp	Ser	Val	Ala
1185				1190						1195					1200
Glu	Val	Leu	Val	Gly	Gln	Ala	Arg	Gly	Ala	Leu	Glu	Glu	Lys	Asp	Phe
			1205						1210					1215	
Gln	Lys	Ala	Glu	Gly	Leu	Leu	Leu	Arg	Ala	Gln	Arg	Pro	Gly	Leu	Ala
		1220						1225					1230		
Leu	Asn	Tyr	Tyr	Lys	Glu	Ala	Gly	Leu	Trp	Ser	Asp	Ala	Leu	Arg	Ile
		1235					1240					1245			
Cys	Lys	Asp	Tyr	Val	Pro	Ser	Gln	Leu	Glu	Ala	Leu	Gln	Glu	Glu	Tyr
		1250				1255						1260			
Glu	Arg	Glu	Ala	Thr	Lys	Lys	Gly	Ala	Arg	Gly	Val	Glu	Gly	Phe	Val
1265					1270					1275					1280

Glu Gln Ala Arg His Trp Glu Gln Ala Gly Glu Tyr Ser Arg Ala Val
 1285 1290 1295
 Asp Cys Tyr Leu Lys Val Arg Asp Ser Gly Asn Ser Gly Leu Ala Glu
 1300 1305 1310
 Lys Cys Trp Met Lys Ala Ala Glu Leu Ser Ile Lys Phe Leu Pro Pro
 1315 1320 1325
 Gln Arg Asn Met Glu Val Val Leu Ala Val Gly Pro Gln Leu Ile Gly
 1330 1335 1340
 Ile Gly Lys His Ser Ala Ala Ala Glu Leu Tyr Leu Asn Leu Asp Leu
 1345 1350 1355 1360
 Val Lys Glu Ala Ile Asp Ala Phe Ile Glu Gly Glu Glu Trp Asn Lys
 1365 1370 1375
 Ala Lys Arg Val Ala Lys Glu Leu Asp Pro Arg Tyr Glu Asp Tyr Val
 1380 1385 1390
 Asp Gln His Tyr Lys Glu Phe Leu Lys Asn Gln Gly Lys Val Asp Ser
 1395 1400 1405
 Leu Val Gly Val Asp Val Ile Ala Ala Leu Asp Leu Tyr Val Glu Gln
 1410 1415 1420
 Gly Gln Trp Asp Lys Cys Ile Glu Thr Ala Thr Lys Gln Asn Tyr Lys
 1425 1430 1435 1440
 Ile Leu His Lys Tyr Val Ala Leu Tyr Ala Thr His Leu Ile Arg Glu
 1445 1450 1455
 Gly Ser Ser Ala Gln Ala Leu Ala Leu Tyr Val Gln His Gly Ala Pro
 1460 1465 1470
 Ala Asn Pro Gln Asn Phe Asn Ile Tyr Lys Arg Ile Phe Thr Asp Met
 1475 1480 1485
 Val Ser Ser Pro Gly Thr Asn Cys Ala Glu Ala Tyr His Ser Trp Ala
 1490 1495 1500
 Asp Leu Arg Asp Val Leu Phe Asn Leu Cys Glu Asn Leu Val Lys Ser
 1505 1510 1515 1520
 Ser Glu Ala Asn Ser Pro Ala His Glu Glu Phe Lys Thr Met Leu Leu
 1525 1530 1535
 Ile Ala His Tyr Tyr Ala Thr Arg Ser Ala Ala Gln Ser Val Lys Gln
 1540 1545 1550
 Leu Glu Thr Val Ala Ala Arg Leu Ser Val Ser Leu Leu Arg His Thr
 1555 1560 1565
 Gln Leu Leu Pro Val Asp Lys Ala Phe Tyr Glu Ala Gly Ile Ala Ala
 1570 1575 1580
 Lys Ala Val Gly Trp Asp Asn Met Ala Phe Ile Phe Leu Asn Arg Phe
 1585 1590 1595 1600
 Leu Asp Leu Thr Asp Ala Ile Glu Glu Gly Thr Leu Asp Gly Leu Asp
 1605 1610 1615
 His Ser Asp Phe Gln Asp Thr Asp Ile Pro Phe Glu Val Pro Leu Pro
 1620 1625 1630
 Ala Lys Gln His Val Pro Glu Ala Glu Arg Glu Glu Val Arg Asp Trp
 1635 1640 1645
 Val Leu Thr Val Ser Met Asp Gln Arg Leu Glu Gln Val Leu Pro Arg
 1650 1655 1660
 Asp Glu Arg Gly Ala Tyr Glu Ala Ser Leu Val Ala Ala Ser Thr Gly
 1665 1670 1675 1680
 Val Arg Ala Leu Pro Cys Leu Ile Thr Gly Tyr Pro Ile Leu Arg Asn
 1685 1690 1695
 Lys Ile Glu Phe Lys Arg Pro Gly Lys Ala Ala Asn Lys Asp Asn Trp
 1700 1705 1710
 Asn Lys Phe Leu Met Ala Ile Lys Thr Ser His Ser Pro Val Cys Gln
 1715 1720 1725
 Asp Val Leu Lys Phe Ile Ser Gln Trp Cys Gly Gly Leu Pro Ser Thr
 1730 1735 1740
 Ser Phe Ser Phe Gln *
 1745 1749

<211> 765
 <212> PRT
 <213> Homo sapiens

<400> 1793

Met	Asn	Glu	Ala	Lys	Val	Lys	Glu	Thr	Leu	Arg	Arg	Cys	Gly	Ala	Ser	1	5	10	15
Gly	Asp	Glu	Cys	Gly	Arg	Leu	Gln	Tyr	Ala	Leu	Thr	Cys	Leu	Arg	Lys	20	25	30	
Val	Thr	Gly	Leu	Gly	Gly	Glu	His	Lys	Glu	Asp	Ser	Ser	Trp	Ser	Ser	35	40	45	
Leu	Asp	Ala	Arg	Arg	Glu	Ser	Gly	Ser	Gly	Pro	Ser	Thr	Asp	Thr	Leu	50	55	60	
Ser	Ala	Ala	Ser	Leu	Pro	Trp	Pro	Pro	Gly	Ser	Ser	Gln	Leu	Gly	Arg	65	70	75	80
Ala	Gly	Asn	Ser	Ala	Gln	Gly	Pro	Arg	Ser	Ile	Ser	Val	Ser	Ala	Leu	85	90	95	
Pro	Ala	Ser	Asp	Ser	Pro	Thr	Pro	Ser	Phe	Ser	Glu	Gly	Leu	Ser	Asp	100	105	110	
Thr	Cys	Ile	Pro	Leu	His	Ala	Ser	Gly	Arg	Leu	Thr	Pro	Arg	Ala	Leu	115	120	125	
His	Ser	Phe	Ile	Thr	Pro	Pro	Thr	Thr	Pro	Gln	Leu	Arg	Arg	His	Thr	130	135	140	
Lys	Leu	Lys	Pro	Pro	Arg	Thr	Pro	Pro	Pro	Pro	Ser	Arg	Lys	Val	Phe	145	150	155	160
Gln	Leu	Leu	Pro	Ser	Phe	Pro	Thr	Leu	Thr	Arg	Ser	Lys	Ser	His	Glu	165	170	175	
Ser	Gln	Leu	Gly	Asn	Arg	Ile	Asp	Asp	Val	Ser	Ser	Met	Arg	Phe	Asp	180	185	190	
Leu	Ser	His	Gly	Ser	Pro	Gln	Met	Val	Arg	Arg	Asp	Ile	Gly	Leu	Ser	195	200	205	
Val	Thr	His	Arg	Phe	Ser	Thr	Lys	Ser	Trp	Leu	Ser	Gln	Val	Cys	His	210	215	220	
Val	Cys	Gln	Lys	Ser	Met	Ile	Phe	Gly	Val	Lys	Cys	Lys	His	Cys	Arg	225	230	235	240
Leu	Lys	Cys	His	Asn	Lys	Cys	Thr	Lys	Glu	Ala	Pro	Ala	Cys	Arg	Ile	245	250	255	
Ser	Phe	Leu	Pro	Leu	Thr	Arg	Leu	Arg	Arg	Thr	Glu	Ser	Val	Pro	Ser	260	265	270	
Asp	Ile	Asn	Asn	Pro	Val	Asp	Arg	Ala	Ala	Glu	Pro	His	Phe	Gly	Thr	275	280	285	
Leu	Pro	Lys	Ala	Leu	Thr	Lys	Lys	Glu	His	Pro	Pro	Ala	Met	Asn	His	290	295	300	
Leu	Asp	Ser	Ser	Ser	Asn	Pro	Ser	Ser	Thr	Thr	Ser	Ser	Thr	Pro	Ser	305	310	315	320
Ser	Pro	Ala	Pro	Phe	Pro	Thr	Ser	Ser	Asn	Pro	Ser	Ser	Ala	Thr	Thr	325	330	335	
Pro	Pro	Asn	Pro	Ser	Pro	Gly	Gln	Arg	Asp	Ser	Arg	Phe	Asn	Phe	Pro	340	345	350	
Ala	Ala	Tyr	Phe	Ile	His	His	Arg	Gln	Gln	Phe	Ile	Phe	Pro	Asp	Ile	355	360	365	
Ser	Ala	Phe	Ala	His	Ala	Ala	Pro	Leu	Pro	Glu	Ala	Ala	Asp	Gly	Thr	370	375	380	
Arg	Leu	Asp	Asp	Gln	Pro	Lys	Ala	Asp	Val	Leu	Glu	Ala	His	Glu	Ala	385	390	395	400
Glu	Ala	Glu	Glu	Pro	Glu	Ala	Gly	Lys	Ser	Glu	Ala	Glu	Asp	Asp	Glu	405	410	415	
Asp	Glu	Val	Asp	Asp	Leu	Pro	Ser	Ser	Arg	Arg	Pro	Trp	Arg	Gly	Pro	420	425	430	
Ile	Ser	Arg	Lys	Ala	Ser	Gln	Thr	Ser	Val	Tyr	Leu	Gln	Glu	Trp	Asp	435	440	445	
Ile	Pro	Phe	Glu	Gln	Val	Glu	Leu	Gly	Glu	Pro	Ile	Gly	Gln	Gly	Arg	450	455	460	

Trp	Gly	Arg	Val	His	Arg	Gly	Arg	Trp	His	Gly	Glu	Val	Ala	Ile	Arg
465					470					475					480
Leu	Leu	Glu	Met	Asp	Gly	His	Asn	Gln	Asp	His	Leu	Lys	Leu	Phe	Lys
				485					490						495
Lys	Glu	Val	Met	Asn	Tyr	Arg	Gln	Thr	Arg	His	Glu	Asn	Val	Val	Leu
			500					505						510	
Phe	Met	Gly	Ala	Cys	Met	Asn	Pro	Pro	His	Leu	Ala	Ile	Ile	Thr	Ser
		515					520						525		
Phe	Cys	Lys	Gly	Arg	Thr	Leu	His	Ser	Phe	Val	Arg	Asp	Pro	Lys	Thr
		530				535					540				
Ser	Leu	Asp	Ile	Asn	Lys	Thr	Arg	Gln	Ile	Ala	Gln	Glu	Ile	Ile	Lys
545					550					555					560
Gly	Met	Gly	Tyr	Leu	His	Ala	Lys	Gly	Ile	Val	His	Lys	Asp	Leu	Lys
				565					570						575
Ser	Lys	Asn	Val	Phe	Tyr	Asp	Asn	Gly	Lys	Val	Val	Ile	Thr	Asp	Phe
			580					585						590	
Gly	Leu	Phe	Gly	Ile	Ser	Gly	Val	Val	Arg	Glu	Gly	Arg	Arg	Glu	Asn
		595					600					605			
Gln	Leu	Lys	Leu	Ser	His	Asp	Trp	Leu	Cys	Tyr	Leu	Ala	Pro	Glu	Ile
		610				615						620			
Val	Arg	Glu	Met	Thr	Pro	Gly	Lys	Asp	Glu	Asp	Gln	Leu	Pro	Phe	Ser
625					630					635					640
Lys	Ala	Ala	Asp	Val	Tyr	Ala	Phe	Gly	Thr	Val	Trp	Tyr	Glu	Leu	Gln
				645					650						655
Ala	Arg	Asp	Trp	Pro	Leu	Lys	Asn	Gln	Ala	Ala	Glu	Ala	Ser	Ile	Trp
			660					665						670	
Gln	Ile	Gly	Ser	Gly	Glu	Gly	Met	Lys	Arg	Val	Leu	Thr	Ser	Val	Ser
		675					680							685	
Leu	Gly	Lys	Glu	Val	Ser	Glu	Ile	Leu	Ser	Ala	Cys	Trp	Ala	Phe	Asp
		690				695					700				
Leu	Gln	Glu	Arg	Pro	Ser	Phe	Ser	Leu	Leu	Met	Asp	Met	Leu	Glu	Lys
705					710					715					720
Leu	Pro	Lys	Leu	Asn	Arg	Arg	Leu	Ser	His	Pro	Gly	His	Phe	Trp	Lys
				725					730						735
Ser	Ala	Asp	Ile	Asn	Ser	Ser	Lys	Val	Val	Pro	Arg	Phe	Glu	Arg	Phe
			740					745						750	
Gly	Leu	Gly	Val	Leu	Glu	Ser	Ser	Asn	Pro	Lys	Met	*			
		755					760				764				

<210> 1794

<211> 309

<212> PRT

<213> Homo sapiens

<400> 1794

Met	Ala	His	Tyr	Ile	Thr	Phe	Leu	Cys	Met	Val	Leu	Val	Leu	Leu	Leu
1				5					10					15	
Gln	Asn	Ser	Val	Leu	Ala	Glu	Asp	Gly	Glu	Val	Arg	Ser	Ser	Cys	Arg
			20					25					30		
Thr	Ala	Pro	Thr	Asp	Leu	Val	Phe	Ile	Leu	Asp	Gly	Ser	Tyr	Ser	Val
			35				40						45		
Gly	Pro	Glu	Asn	Phe	Glu	Ile	Val	Lys	Lys	Trp	Leu	Val	Asn	Ile	Thr
		50				55					60				
Lys	Asn	Phe	Asp	Ile	Gly	Pro	Lys	Phe	Ile	Gln	Val	Gly	Val	Val	Gln
				70						75					80
Tyr	Ser	Asp	Tyr	Pro	Val	Leu	Glu	Ile	Pro	Leu	Gly	Ser	Tyr	Asp	Ser
				85					90					95	
Gly	Glu	His	Leu	Thr	Ala	Ala	Val	Glu	Ser	Ile	Leu	Tyr	Leu	Gly	Gly
			100					105					110		
Asn	Thr	Lys	Thr	Gly	Lys	Ala	Ile	Gln	Phe	Ala	Leu	Asp	Tyr	Leu	Phe
			115				120						125		

Ala	Lys	Ser	Ser	Arg	Phe	Leu	Thr	Lys	Ile	Ala	Val	Val	Leu	Thr	Asp
130						135					140				
Gly	Lys	Ser	Gln	Asp	Asp	Val	Lys	Asp	Ala	Ala	Gln	Ala	Ala	Arg	Asp
145				150					155						160
Ser	Lys	Ile	Thr	Leu	Phe	Ala	Ile	Gly	Val	Gly	Ser	Glu	Thr	Glu	Asp
				165					170					175	
Ala	Glu	Leu	Arg	Ala	Ile	Ala	Asn	Lys	Pro	Ser	Ser	Thr	Tyr	Val	Phe
			180					185					190		
Tyr	Val	Glu	Asp	Tyr	Ile	Ala	Ile	Ser	Lys	Ile	Arg	Glu	Val	Met	Lys
	195						200					205			
Gln	Lys	Leu	Cys	Glu	Glu	Ser	Val	Cys	Pro	Thr	Arg	Ile	Pro	Val	Ala
210						215					220				
Ala	Arg	Asp	Glu	Arg	Gly	Phe	Asp	Ile	Leu	Leu	Gly	Leu	Asp	Val	Asn
225					230				235						240
Lys	Lys	Val	Lys	Lys	Arg	Ile	Gln	Leu	Ser	Pro	Lys	Lys	Ile	Lys	Gly
				245				250						255	
Tyr	Glu	Val	Thr	Ser	Lys	Val	Asp	Leu	Ser	Glu	Leu	Thr	Ser	Asn	Val
			260					265					270		
Phe	Pro	Glu	Gly	Leu	Pro	Pro	Ser	Tyr	Val	Phe	Val	Ser	Thr	Gln	Arg
	275						280					285			
Phe	Lys	Val	Lys	Lys	Ile	Trp	Asp	Leu	Trp	Arg	Ile	Leu	Thr	Ile	Asp
290						295					300				
Gly	Cys	His	Lys	*											
305			308												

<210> 1795

<211> 435

<212> PRT

<213> Homo sapiens

<400> 1795

Met	Asp	Phe	Asn	Gly	Val	Gln	Phe	Val	Cys	Arg	Asn	Leu	Leu	Lys	Val
1				5					10					15	
Ser	Met	Phe	Leu	Asn	Thr	Leu	Thr	Pro	Lys	Phe	Tyr	Val	Ala	Leu	Thr
			20					25					30		
Gly	Thr	Ser	Ser	Leu	Ile	Ser	Gly	Leu	Ile	Leu	Ile	Phe	Glu	Trp	Trp
		35					40					45			
Tyr	Phe	Arg	Lys	Tyr	Gly	Thr	Ser	Phe	Ile	Glu	Gln	Val	Ser	Val	Ser
	50					55					60				
His	Leu	Arg	Pro	Leu	Leu	Gly	Gly	Val	Asp	Asn	Asn	Ser	Ser	Asn	Asn
65				70						75					80
Ser	Asn	Ser	Ser	Asn	Gly	Asp	Ser	Asp	Ser	Asn	Arg	Gln	Ser	Val	Ser
				85					90					95	
Glu	Cys	Lys	Val	Trp	Arg	Asn	Pro	Leu	Asn	Leu	Phe	Arg	Gly	Ala	Glu
			100					105					110		
Tyr	Asn	Arg	Tyr	Thr	Trp	Val	Thr	Gly	Arg	Glu	Pro	Leu	Thr	Tyr	Tyr
	115						120					125			
Asp	Met	Asn	Leu	Ser	Ala	Gln	Asp	His	Gln	Thr	Phe	Phe	Thr	Cys	Asp
	130					135					140				
Ser	Asp	His	Leu	Arg	Pro	Ala	Asp	Ala	Ile	Met	Gln	Lys	Ala	Trp	Arg
145				150						155					160
Glu	Arg	Asn	Pro	Gln	Ala	Arg	Ile	Ser	Ala	Ala	His	Glu	Ala	Leu	Glu
				165					170					175	
Ile	Asn	Glu	Thr	Arg	His	Gln	Cys	Leu	Gly	Val	His	Gln	Lys	Lys	Ala
			180					185					190		
Ser	Asn	Val	Cys	Gln	Lys	Thr	Arg	Glu	Asp	Gln	Gly	Ser	Lys	Ala	Leu
	195						200					205			
Leu	Glu	Leu	Gln	Ala	Tyr	Ala	Asp	Val	Gln	Ala	Val	Leu	Ala	Lys	Tyr
210						215					220				
Asp	Asp	Ile	Ser	Leu	Pro	Lys	Ser	Ala	Thr	Ile	Cys	Tyr	Thr	Ala	Ala
225					230					235					240

Leu Leu Lys Ala Arg Ala Val Ser Asp Lys Phe Ser Pro Glu Ala Ala
 245 250 255
 Ser Arg Arg Gly Leu Ser Thr Ala Glu Met Asn Ala Val Glu Ala Ile
 260 265 270
 His Arg Ala Val Glu Phe Asn Pro His Val Pro Lys Tyr Leu Leu Glu
 275 280 285
 Met Lys Ser Leu Ile Leu Pro Pro Glu His Ile Leu Lys Arg Gly Asp
 290 295 300
 Ser Glu Ala Ile Ala Tyr Ala Phe Phe His Leu Ala His Trp Lys Arg
 305 310 315 320
 Val Glu Gly Ala Leu Asn Leu Leu His Cys Thr Trp Glu Gly Thr Phe
 325 330 335
 Arg Met Ile Pro Tyr Pro Leu Glu Lys Gly His Leu Phe Tyr Pro Tyr
 340 345 350
 Pro Ile Cys Thr Glu Thr Ala Asp Arg Glu Leu Leu Pro Ser Phe His
 355 360 365
 Glu Val Ser Val Tyr Pro Lys Lys Glu Leu Pro Phe Phe Ile Leu Phe
 370 375 380
 Thr Ala Gly Leu Cys Ser Phe Thr Ala Met Leu Ala Leu Leu Thr His
 385 390 395 400
 Gln Phe Pro Glu Leu Met Gly Val Phe Ala Lys Ala Val Ser Val Cys
 405 410 415
 Leu Glu Gly Gly Leu Gly Glu Trp Met Gly Lys Ala Lys Gly Ile Lys
 420 425 430
 Ala Ala *
 434

<210> 1796
 <211> 244
 <212> PRT
 <213> Homo sapiens

<400> 1796
 Met Ser Pro Tyr Gln Leu Asn Ala Tyr Ala Leu Ala Leu Thr Ala Val
 1 5 10 15
 Gly Glu Ile Ile Gln His Tyr Asp Ser Asp Lys Met Phe Pro Ala Leu
 20 25 30
 Gly Phe Gly Ala Lys Leu Pro Pro Asp Gly Arg Val Ser His Glu Phe
 35 40 45
 Pro Leu Asn Gly Asn Gln Glu Asn Pro Ser Cys Cys Gly Ile Asp Gly
 50 55 60
 Ile Leu Glu Ala Tyr His Arg Ser Leu Arg Thr Val Gln Leu Tyr Gly
 65 70 75 80
 Pro Thr Asn Phe Ala Pro Val Val Thr His Val Ala Arg Asn Ala Ala
 85 90 95
 Ala Val Gln Asp Gly Ser Gln Tyr Ser Val Leu Leu Ile Ile Thr Asp
 100 105 110
 Gly Val Ile Ser Asp Met Ala Gln Thr Lys Glu Ala Ile Val Asn Ala
 115 120 125
 Ala Lys Leu Pro Met Ser Ile Ile Ile Val Gly Val Gly Gln Ala Glu
 130 135 140
 Phe Asp Ala Met Val Glu Leu Asp Gly Asp Asp Val Arg Ile Ser Ser
 145 150 155 160
 Arg Gly Lys Leu Ala Glu Arg Asp Ile Val Gln Phe Val Pro Phe Arg
 165 170 175
 Asp Tyr Val Asp Arg Thr Gly Asn His Val Leu Ser Met Ala Arg Leu
 180 185 190
 Ala Arg Asp Val Leu Ala Glu Ile Pro Asp Gln Leu Val Ser Tyr Met
 195 200 205
 Lys Ala Gln Gly Ile Arg Pro Arg Ser Pro Pro Ala Ala Pro Thr His
 210 215 220

Ser Pro Ser Gln Ser Pro Ala Arg Thr Pro Pro Ala Cys Pro Leu His
 225 230 235 240
 Thr His Ile *
 243

<210> 1797
 <211> 1093
 <212> PRT
 <213> Homo sapiens

<400> 1797
 Met Met Asp Ser Pro Lys Ile Gly Asn Gly Leu Pro Val Ile Gly Pro
 1 5 10 15
 Gly Thr Asp Ile Gly Ile Ser Ser Leu His Met Val Gly Tyr Leu Gly
 20 25 30
 Lys Asn Phe Asp Ser Ala Lys Val Pro Ser Asp Glu Tyr Cys Pro Ala
 35 40 45
 Cys Arg Glu Lys Gly Lys Leu Lys Ala Leu Lys Thr Tyr Arg Ile Ser
 50 55 60
 Phe Gln Glu Ser Ile Phe Leu Cys Glu Asp Leu Gln Cys Ile Tyr Pro
 65 70 75 80
 Leu Gly Ser Lys Ser Leu Asn Asn Leu Ile Ser Pro Asp Leu Glu Glu
 85 90 95
 Cys His Thr Pro His Lys Pro Gln Lys Arg Lys Ser Leu Glu Ser Ser
 100 105 110
 Tyr Lys Asp Ser Leu Leu Leu Ala Asn Ser Lys Lys Thr Arg Asn Tyr
 115 120 125
 Ile Ala Ile Asp Gly Gly Lys Val Leu Asn Ser Lys His Asn Gly Glu
 130 135 140
 Val Tyr Asp Glu Thr Ser Ser Asn Leu Pro Asp Ser Ser Gly Gln Gln
 145 150 155 160
 Asn Pro Ile Arg Thr Ala Asp Ser Leu Glu Arg Asn Glu Ile Leu Glu
 165 170 175
 Ala Asp Thr Val Asp Met Ala Thr Thr Lys Asp Pro Ala Thr Val Asp
 180 185 190
 Val Ser Gly Thr Gly Arg Pro Ser Pro Gln Asn Glu Gly Cys Thr Ser
 195 200 205
 Lys Leu Glu Met Pro Leu Glu Ser Lys Cys Thr Ser Phe Pro Gln Ala
 210 215 220
 Leu Cys Val Gln Trp Lys Asn Ala Tyr Ala Leu Cys Trp Leu Asp Cys
 225 230 235 240
 Ile Leu Ser Ala Leu Val His Ser Glu Glu Leu Lys Asn Thr Val Thr
 245 250 255
 Gly Leu Cys Ser Lys Glu Glu Ser Ile Phe Trp Arg Leu Leu Thr Lys
 260 265 270
 Tyr Asn Gln Ala Asn Thr Leu Leu Tyr Thr Ser Gln Leu Ser Gly Val
 275 280 285
 Lys Asp Gly Asp Cys Lys Lys Leu Thr Ser Glu Ile Phe Ala Glu Ile
 290 295 300
 Glu Thr Cys Leu Asn Glu Val Arg Asp Glu Ile Phe Ile Ser Leu Gln
 305 310 315 320
 Pro Gln Leu Arg Cys Thr Leu Gly Asp Met Glu Ser Pro Val Phe Ala
 325 330 335
 Phe Pro Leu Leu Leu Lys Leu Glu Thr His Ile Glu Lys Leu Phe Leu
 340 345 350
 Tyr Ser Phe Ser Trp Asp Phe Glu Cys Ser Gln Cys Gly His Gln Tyr
 355 360 365
 Gln Asn Arg His Met Lys Ser Leu Val Thr Phe Thr Asn Val Ile Pro
 370 375 380
 Glu Trp His Pro Leu Asn Ala Ala His Phe Gly Pro Cys Asn Asn Cys
 385 390 395 400

Asn	Ser	Lys	Ser	Gln	Ile	Arg	Lys	Met	Val	Leu	Glu	Lys	Val	Ser	Pro
				405					410					415	
Ile	Phe	Met	Leu	His	Phe	Val	Glu	Gly	Leu	Pro	Gln	Asn	Asp	Leu	Gln
			420					425					430		
His	Tyr	Ala	Phe	His	Phe	Glu	Gly	Cys	Leu	Tyr	Gln	Ile	Thr	Ser	Val
		435					440					445			
Ile	Gln	Tyr	Arg	Ala	Asn	Asn	His	Phe	Ile	Thr	Trp	Ile	Leu	Asp	Ala
	450				455						460				
Asp	Gly	Ser	Trp	Leu	Glu	Cys	Asp	Asp	Leu	Lys	Gly	Pro	Cys	Ser	Glu
465					470					475					480
Arg	His	Lys	Lys	Phe	Glu	Val	Pro	Ala	Ser	Glu	Ile	His	Ile	Val	Ile
				485				490						495	
Trp	Glu	Arg	Lys	Ile	Ser	Gln	Val	Thr	Asp	Lys	Glu	Ala	Ala	Cys	Leu
			500					505					510		
Pro	Leu	Lys	Lys	Thr	Asn	Asp	Gln	His	Ala	Leu	Ser	Asn	Glu	Lys	Pro
		515					520					525			
Val	Ser	Leu	Thr	Ser	Cys	Ser	Val	Gly	Asp	Ala	Ala	Ser	Ala	Glu	Thr
	530					535				540					
Ala	Ser	Val	Thr	His	Pro	Lys	Asp	Ile	Ser	Val	Ala	Pro	Arg	Thr	Leu
545					550					555					560
Ser	Gln	Asp	Thr	Ala	Val	Thr	His	Gly	Asp	His	Leu	Leu	Ser	Gly	Pro
				565				570						575	
Lys	Gly	Leu	Val	Asp	Asn	Ile	Leu	Pro	Leu	Thr	Leu	Glu	Glu	Thr	Ile
		580					585						590		
Gln	Lys	Thr	Ala	Ser	Val	Ser	Gln	Leu	Asn	Ser	Glu	Ala	Phe	Leu	Leu
	595						600					605			
Glu	Asn	Lys	Pro	Val	Ala	Glu	Asn	Thr	Gly	Ile	Leu	Lys	Thr	Asn	Thr
	610					615					620				
Leu	Leu	Ser	Gln	Glu	Ser	Leu	Met	Ala	Ser	Ser	Val	Ser	Ala	Pro	Cys
625					630					635					640
Asn	Glu	Lys	Leu	Ile	Gln	Asp	Gln	Phe	Val	Asp	Ile	Ser	Phe	Pro	Ser
			645					650						655	
Gln	Val	Val	Asn	Thr	Asn	Met	Gln	Ser	Val	Gln	Leu	Asn	Thr	Glu	Asp
			660					665					670		
Thr	Val	Asn	Thr	Lys	Ser	Val	Asn	Asn	Thr	Asp	Ala	Thr	Gly	Leu	Ile
	675						680					685			
Gln	Gly	Val	Lys	Ser	Val	Glu	Ile	Glu	Lys	Asp	Ala	Gln	Leu	Lys	Gln
	690					695					700				
Phe	Leu	Thr	Pro	Lys	Thr	Glu	Gln	Leu	Lys	Pro	Glu	Arg	Val	Thr	Ser
705					710					715					720
Gln	Val	Ser	Asn	Leu	Lys	Lys	Lys	Glu	Thr	Thr	Ala	Asp	Ser	Gln	Thr
			725					730						735	
Thr	Thr	Ser	Lys	Ser	Leu	Gln	Asn	Gln	Ser	Leu	Lys	Glu	Asn	Gln	Lys
			740					745					750		
Lys	Pro	Phe	Val	Gly	Ser	Trp	Val	Lys	Gly	Leu	Ile	Ser	Arg	Gly	Ala
	755						760					765			
Ser	Phe	Met	Pro	Leu	Cys	Val	Ser	Ala	His	Asn	Arg	Asn	Thr	Ile	Thr
	770					775					780				
Asp	Leu	Gln	Pro	Ser	Val	Lys	Gly	Val	Asn	Asn	Phe	Gly	Gly	Phe	Lys
785					790					795					800
Thr	Lys	Gly	Ile	Asn	Gln	Lys	Ala	Ser	His	Val	Ser	Lys	Lys	Ala	Arg
			805					810						815	
Lys	Ser	Ala	Ser	Lys	Pro	Pro	Pro	Ile	Ser	Lys	Pro	Pro	Ala	Gly	Pro
			820					825					830		
Pro	Ser	Ser	Asn	Gly	Thr	Ala	Ala	His	Pro	His	Ala	His	Ala	Ala	Ser
	835						840					845			
Glu	Val	Leu	Glu	Lys	Ser	Gly	Ser	Thr	Ser	Cys	Gly	Ala	Gln	Leu	Asn
	850					855					860				
His	Ser	Ser	Tyr	Gly	Asn	Gly	Ile	Ser	Ser	Ala	Asn	His	Glu	Asp	Leu
865					870					875					880
Val	Glu	Gly	Gln	Ile	His	Lys	Leu	Arg	Leu	Lys	Leu	Arg	Lys	Lys	Leu
			885					890						895	
Lys	Ala	Glu	Lys	Lys	Lys	Leu	Ala	Ala	Leu	Met	Ser	Ser	Pro	Gln	Ser
			900					905						910	

Arg Thr Val Arg Ser Glu Asn Leu Glu Gln Val Pro Gln Asp Gly Ser
 915 920 925
 Pro Asn Asp Cys Glu Ser Ile Glu Asp Leu Leu Asn Glu Leu Pro Tyr
 930 935 940
 Pro Ile Asp Ile Ala Asn Glu Ser Ala Cys Thr Thr Val Pro Gly Val
 945 950 955 960
 Ser Leu Tyr Ser Ser Gln Thr His Glu Glu Ile Leu Ala Glu Leu Leu
 965 970 975
 Ser Pro Thr Pro Val Ser Thr Glu Leu Ser Glu Asn Gly Glu Gly Asp
 980 985 990
 Phe Arg Tyr Leu Gly Met Gly Asp Ser His Ile Pro Pro Pro Val Pro
 995 1000 1005
 Ser Glu Phe Asn Asp Val Ser Gln Asn Thr His Leu Arg Gln Asp His
 1010 1015 1020
 Asn Tyr Cys Ser Pro Thr Lys Lys Asn Pro Cys Glu Val Gln Pro Asp
 1025 1030 1035 1040
 Ser Leu Thr Asn Asn Ala Cys Val Arg Thr Leu Asn Leu Glu Ser Pro
 1045 1050 1055
 Met Lys Thr Asp Ile Phe Asp Glu Phe Phe Ser Ser Ser Ala Leu Asn
 1060 1065 1070
 Ala Leu Ala Asn Asp Thr Leu Asp Leu Pro His Phe Asp Glu Tyr Leu
 1075 1080 1085
 Phe Glu Asn Tyr *
 1090 1092

<210> 1798
 <211> 573
 <212> PRT
 <213> Homo sapiens

<400> 1798
 Met Asp Ala Lys Ser Leu Thr Ala Trp Ser Arg Thr Leu Val Thr Phe
 1 5 10 15
 Lys Asp Val Phe Val Asp Phe Thr Arg Glu Glu Trp Lys Leu Leu Asp
 20 25 30
 Thr Ala Gln Gln Ile Val Tyr Arg Asn Val Met Leu Glu Asn Tyr Lys
 35 40 45
 Asn Leu Val Ser Leu Gly Tyr Gln Leu Thr Lys Pro Asp Val Ile Leu
 50 55 60
 Arg Leu Glu Lys Gly Glu Pro Trp Leu Val Glu Arg Glu Ile His
 65 70 75 80
 Gln Glu Thr His Pro Asp Ser Glu Thr Ala Phe Glu Ile Lys Ser Ser
 85 90 95
 Val Ser Ser Arg Ser Ile Phe Lys Asp Lys Gln Ser Cys Asp Ile Lys
 100 105 110
 Met Glu Gly Met Ala Arg Asn Asp Leu Trp Tyr Leu Ser Leu Glu Glu
 115 120 125
 Val Trp Lys Cys Arg Asp Gln Leu Asp Lys Tyr Gln Glu Asn Pro Glu
 130 135 140
 Arg His Leu Arg Gln Val Ala Phe Thr Gln Lys Lys Val Leu Thr Gln
 145 150 155 160
 Glu Arg Val Ser Glu Ser Gly Lys Tyr Gly Gly Asn Cys Leu Leu Pro
 165 170 175
 Ala Gln Leu Val Leu Arg Glu Tyr Phe His Lys Arg Asp Ser His Thr
 180 185 190
 Lys Ser Leu Lys His Asp Leu Val Leu Asn Gly His Gln Asp Ser Cys
 195 200 205
 Ala Ser Asn Ser Asn Glu Cys Gly Gln Thr Phe Cys Gln Asn Ile His
 210 215 220
 Leu Ile Gln Phe Ala Arg Thr His Thr Gly Asp Lys Ser Tyr Lys Cys
 225 230 235 240

Pro Asp Asn Asp Asn Ser Leu Thr His Gly Ser Ser Leu Gly Ile Ser
 245 250 255
 Lys Gly Ile His Arg Glu Lys Pro Tyr Glu Cys Lys Glu Cys Gly Lys
 260 265 270
 Phe Phe Ser Trp Arg Ser Asn Leu Thr Arg His Gln Leu Ile His Thr
 275 280 285
 Gly Glu Lys Pro Tyr Glu Cys Lys Glu Cys Gly Lys Ser Phe Ser Arg
 290 295 300
 Ser Ser His Leu Ile Gly His Gln Lys Thr His Thr Gly Glu Glu Pro
 305 310 315 320
 Tyr Glu Cys Lys Glu Cys Gly Lys Ser Phe Ser Trp Phe Ser His Leu
 325 330 335
 Val Thr His Gln Arg Thr His Thr Gly Asp Lys Leu Tyr Thr Cys Asn
 340 345 350
 Gln Cys Gly Lys Ser Phe Val His Ser Ser Arg Leu Ile Arg His Gln
 355 360 365
 Arg Thr His Thr Gly Glu Lys Pro Tyr Glu Cys Pro Glu Cys Gly Lys
 370 375 380
 Ser Phe Arg Gln Ser Thr His Leu Ile Leu His Gln Arg Thr His Val
 385 390 395 400
 Arg Val Arg Pro Tyr Glu Cys Asn Glu Cys Gly Lys Ser Tyr Ser Gln
 405 410 415
 Arg Ser His Leu Val Val His His Arg Ile His Thr Gly Leu Lys Pro
 420 425 430
 Phe Glu Cys Lys Asp Cys Gly Lys Cys Phe Ser Arg Ser Ser His Leu
 435 440 445
 Tyr Ser His Gln Arg Thr His Thr Gly Glu Lys Pro Tyr Glu Cys His
 450 455 460
 Asp Cys Gly Lys Ser Phe Ser Gln Ser Ser Ala Leu Ile Val His Gln
 465 470 475 480
 Arg Ile His Thr Gly Glu Lys Pro Tyr Glu Cys Cys Gln Cys Gly Lys
 485 490 495
 Ala Phe Ile Arg Lys Asn Asp Leu Ile Lys His Gln Arg Ile His Val
 500 505 510
 Gly Glu Glu Thr Tyr Lys Cys Asn Gln Cys Gly Ile Ile Phe Ser Gln
 515 520 525
 Asn Ser Pro Phe Ile Val His Gln Ile Ala His Thr Gly Glu Gln Phe
 530 535 540
 Leu Thr Cys Asn Gln Cys Gly Thr Ala Leu Val Asn Thr Ser Asn Leu
 545 550 555 560
 Ile Gly Tyr Gln Thr Asn His Ile Arg Glu Asn Ala Tyr
 565 570 573

<210> 1799
 <211> 440
 <212> PRT
 <213> Homo sapiens

<400> 1799
 Met Asp Ala Lys Ser Leu Thr Ala Trp Ser Arg Thr Leu Val Thr Phe
 1 5 10 15
 Lys Asp Val Phe Val Asp Phe Thr Arg Glu Glu Trp Lys Leu Leu Asp
 20 25 30
 Thr Ala Gln Gln Ile Val Tyr Arg Asn Val Met Leu Glu Asn Tyr Lys
 35 40 45
 Asn Leu Val Ser Leu Gly Tyr Gln Leu Thr Lys Pro Asp Val Ile Leu
 50 55 60
 Arg Leu Glu Lys Gly Glu Glu Pro Trp Leu Val Glu Arg Glu Ile His
 65 70 75 80
 Gln Glu Thr His Pro Asp Ser Glu Thr Ala Phe Glu Ile Lys Ser Ser
 85 90 95

Val Ser Ser Arg Ser Ile Phe Lys Asp Lys Gln Ser Cys Asp Ile Lys
 100 105 110
 Met Glu Gly Met Ala Arg Asn Asp Leu Trp Tyr Leu Ser Leu Glu Glu
 115 120 125
 Val Trp Lys Cys Arg Asp Gln Leu Asp Lys Tyr Gln Glu Asn Pro Glu
 130 135 140
 Arg His Leu Arg His Gln Leu Ile His Thr Gly Glu Lys Pro Tyr Glu
 145 150 155 160
 Cys Lys Glu Cys Gly Lys Ser Phe Ser Arg Ser Ser His Leu Ile Gly
 165 170 175
 His Gln Lys Thr His Thr Gly Glu Glu Pro Tyr Glu Cys Lys Glu Cys
 180 185 190
 Gly Lys Ser Phe Ser Trp Phe Ser His Leu Val Thr His Gln Arg Thr
 195 200 205
 His Thr Gly Asp Lys Leu Tyr Thr Cys Asn Gln Cys Gly Lys Ser Phe
 210 215 220
 Val His Ser Ser Arg Leu Ile Arg His Gln Arg Thr His Thr Gly Glu
 225 230 235 240
 Lys Pro Tyr Glu Cys Pro Glu Cys Gly Lys Ser Phe Arg Gln Ser Thr
 245 250 255
 His Leu Ile Leu His Gln Arg Thr His Val Arg Val Arg Pro Tyr Glu
 260 265 270
 Cys Asn Glu Cys Gly Lys Ser Tyr Ser Gln Arg Ser His Leu Val Val
 275 280 285
 His His Arg Ile His Thr Gly Leu Lys Pro Phe Glu Cys Lys Asp Cys
 290 295 300
 Gly Lys Cys Phe Ser Arg Ser Ser His Leu Tyr Ser His Gln Arg Thr
 305 310 315 320
 His Thr Gly Glu Lys Pro Tyr Glu Cys His Asp Cys Gly Lys Ser Phe
 325 330 335
 Ser Gln Ser Ser Ala Leu Ile Val His Gln Arg Ile His Thr Gly Glu
 340 345 350
 Lys Pro Tyr Glu Cys Cys Gln Cys Gly Lys Ala Phe Ile Arg Lys Asn
 355 360 365
 Asp Leu Ile Lys His Gln Arg Ile His Val Gly Glu Glu Thr Tyr Lys
 370 375 380
 Cys Asn Gln Cys Gly Ile Ile Phe Ser Gln Asn Ser Pro Phe Ile Val
 385 390 395 400
 His Gln Ile Ala His Thr Gly Glu Gln Phe Leu Thr Cys Asn Gln Cys
 405 410 415
 Gly Thr Ala Leu Val Asn Thr Ser Asn Leu Ile Gly Tyr Gln Thr Asn
 420 425 430
 His Ile Arg Glu Asn Ala Tyr *
 435 439

<210> 1800

<211> 613

<212> PRT

<213> Homo sapiens

<400> 1800

Met Ser Arg Lys Ile Ser Lys Glu Ser Lys Lys Val Asn Ile Ser Ser
 1 5 10 15
 Ser Leu Glu Ser Glu Asp Ile Ser Leu Glu Thr Thr Val Pro Thr Asp
 20 25 30
 Asp Ile Ser Ser Ser Glu Glu Arg Glu Gly Lys Val Arg Ile Thr Arg
 35 40 45
 Gln Leu Ile Glu Arg Lys Glu Leu Leu His Asn Ile Gln Leu Leu Lys
 50 55 60
 Ile Glu Leu Ser Gln Lys Thr Met Met Ile Asp Asn Leu Lys Val Asp
 65 70 75 80

Tyr	Leu	Thr	Lys	Ile	Glu	Glu	Leu	Glu	Glu	Lys	Leu	Asn	Asp	Ala	Leu
				85					90					95	
His	Gln	Lys	Gln	Leu	Leu	Thr	Leu	Arg	Leu	Asp	Asn	Gln	Leu	Ala	Phe
			100					105					110		
Gln	Gln	Lys	Asp	Ala	Ser	Lys	Tyr	Gln	Glu	Leu	Met	Lys	Gln	Glu	Met
		115					120					125			
Glu	Thr	Ile	Leu	Leu	Arg	Gln	Lys	Gln	Leu	Glu	Glu	Thr	Asn	Leu	Gln
	130					135						140			
Leu	Arg	Glu	Lys	Ala	Gly	Asp	Val	Arg	Arg	Ser	Leu	Arg	Asp	Phe	Glu
145					150					155					160
Leu	Thr	Glu	Glu	Gln	Tyr	Ile	Lys	Leu	Lys	Ala	Phe	Pro	Glu	Asp	Gln
				165					170					175	
Leu	Ser	Ile	Pro	Glu	Tyr	Val	Ser	Val	Arg	Phe	Tyr	Glu	Leu	Val	Asn
			180					185					190		
Pro	Leu	Arg	Lys	Glu	Ile	Cys	Glu	Leu	Gln	Val	Lys	Lys	Asn	Ile	Leu
		195					200						205		
Ala	Glu	Glu	Leu	Ser	Thr	Asn	Lys	Asn	Gln	Leu	Lys	Gln	Leu	Thr	Glu
	210					215						220			
Thr	Tyr	Glu	Glu	Asp	Arg	Lys	Asn	Tyr	Ser	Glu	Val	Gln	Ile	Arg	Cys
225					230					235					240
Gln	Arg	Leu	Ala	Leu	Glu	Leu	Ala	Asp	Thr	Lys	Gln	Leu	Ile	Gln	Gln
				245					250					255	
Gly	Asp	Tyr	Arg	Gln	Glu	Asn	Tyr	Asp	Lys	Val	Lys	Ser	Glu	Arg	Asp
		260					265						270		
Ala	Leu	Glu	Gln	Glu	Val	Ile	Glu	Leu	Arg	Arg	Lys	His	Glu	Ile	Leu
		275					280					285			
Glu	Ala	Ser	His	Met	Ile	Gln	Thr	Lys	Glu	Arg	Ser	Glu	Leu	Ser	Lys
	290					295					300				
Glu	Val	Val	Thr	Leu	Glu	Gln	Thr	Val	Thr	Leu	Leu	Gln	Lys	Asp	Lys
305					310					315					320
Glu	Tyr	Leu	Asn	Arg	Gln	Asn	Met	Glu	Leu	Ser	Val	Arg	Cys	Ala	His
			325					330						335	
Glu	Glu	Asp	Arg	Leu	Glu	Arg	Leu	Gln	Ala	Gln	Leu	Glu	Glu	Ser	Lys
		340						345					350		
Lys	Ala	Arg	Glu	Glu	Met	Tyr	Glu	Lys	Tyr	Val	Ala	Ser	Arg	Asp	His
		355					360						365		
Tyr	Lys	Thr	Glu	Tyr	Glu	Asn	Lys	Leu	His	Asp	Glu	Leu	Glu	Gln	Ile
	370					375					380				
Arg	Leu	Lys	Thr	Asn	Gln	Glu	Ile	Asp	Gln	Leu	Arg	Asn	Ala	Ser	Arg
385				390						395					400
Glu	Met	Tyr	Glu	Arg	Glu	Asn	Arg	Asn	Leu	Arg	Glu	Ala	Arg	Asp	Asn
			405						410					415	
Ala	Val	Ala	Glu	Lys	Glu	Arg	Ala	Val	Met	Ala	Glu	Lys	Asp	Ala	Leu
		420						425					430		
Glu	Lys	His	Asp	Gln	Leu	Leu	Asp	Arg	Tyr	Arg	Glu	Leu	Gln	Leu	Ser
	435						440					445			
Thr	Glu	Ser	Lys	Val	Thr	Glu	Phe	Leu	His	Gln	Ser	Lys	Leu	Lys	Ser
	450					455						460			
Phe	Glu	Ser	Glu	Arg	Val	Gln	Leu	Leu	Gln	Glu	Glu	Thr	Ala	Arg	Asn
465				470						475					480
Leu	Thr	Gln	Cys	Gln	Leu	Glu	Cys	Glu	Lys	Tyr	Gln	Lys	Lys	Leu	Glu
			485					490						495	
Val	Leu	Thr	Lys	Glu	Phe	Tyr	Ser	Leu	Gln	Ala	Ser	Ser	Glu	Lys	Arg
		500						505					510		
Ile	Thr	Glu	Leu	Gln	Ala	Gln	Asn	Ser	Glu	His	Gln	Ala	Arg	Leu	Asp
	515						520					525			
Ile	Tyr	Glu	Lys	Leu	Glu	Lys	Glu	Leu	Asp	Glu	Ile	Ile	Met	Gln	Thr
	530					535						540			
Ala	Glu	Ile	Glu	Asn	Glu	Asp	Glu	Ala	Glu	Arg	Val	Leu	Phe	Ser	Tyr
545				550						555					560
Gly	Tyr	Gly	Ala	Asn	Val	Pro	Thr	Thr	Ala	Lys	Arg	Arg	Leu	Lys	Gln
			565						570					575	
Ser	Val	His	Leu	Ala	Arg	Arg	Val	Leu	Gln	Leu	Glu	Lys	Gln	Asn	Ser
			580					585					590		

Leu Ile Leu Lys Asp Leu Glu His Arg Lys Asp Gln Val Thr Gln Leu
 595 600 605
 Ser Pro Gly Ala *
 610 612

<210> 1801
 <211> 754
 <212> PRT
 <213> Homo sapiens

<400> 1801
 Met Lys Val Ile Gly Phe Lys Pro Glu Glu Ile Gln Thr Val Tyr Lys
 1 5 10 15
 Ile Leu Ala Ala Ile Leu His Leu Gly Asn Leu Lys Phe Val Val Asp
 20 25 30
 Gly Asp Thr Pro Leu Ile Glu Asn Gly Lys Val Val Ser Ile Ile Ala
 35 40 45
 Glu Leu Leu Ser Thr Lys Thr Asp Met Val Glu Lys Ala Leu Leu Tyr
 50 55 60
 Arg Thr Gly Ala Thr Gly Arg Asp Ile Ile Asp Lys Gln His Thr Glu
 65 70 75 80
 Gln Glu Ala Ser Tyr Gly Arg Asp Ala Phe Ala Lys Ala Ile Tyr Glu
 85 90 95
 Arg Leu Phe Cys Trp Ile Val Thr Arg Ile Asn Asp Ile Ile Glu Val
 100 105 110
 Lys Asn Tyr Asp Thr Thr Ile His Gly Lys Asn Thr Val Ile Gly Val
 115 120 125
 Leu Asp Ile Tyr Gly Phe Glu Ile Phe Asp Asn Asn Ser Phe Glu Gln
 130 135 140
 Phe Cys Ile Asn Tyr Cys Asn Glu Lys Leu Gln Gln Leu Phe Ile Gln
 145 150 155 160
 Leu Val Leu Lys Gln Glu Gln Glu Glu Tyr Gln Arg Glu Gly Ile Pro
 165 170 175
 Trp Lys His Ile Asp Tyr Phe Asn Asn Gln Ile Ile Val Asp Leu Val
 180 185 190
 Glu Gln Gln His Lys Gly Ile Ile Ala Ile Leu Asp Asp Ala Cys Met
 195 200 205
 Asn Val Gly Lys Val Thr Asp Glu Met Phe Leu Glu Ala Leu Asn Ser
 210 215 220
 Lys Leu Gly Lys His Ala His Phe Ser Ser Arg Lys Leu Cys Ala Ser
 225 230 235 240
 Asp Lys Ile Leu Glu Phe Asp Arg Asp Phe Arg Ile Arg His Tyr Ala
 245 250 255
 Gly Asp Val Val Tyr Ser Val Ile Gly Phe Ile Asp Lys Asn Lys Asp
 260 265 270
 Thr Leu Phe Gln Asp Phe Lys Arg Leu Met Tyr Asn Ser Ser Asn Pro
 275 280 285
 Val Leu Lys Asn Met Trp Pro Glu Gly Lys Leu Ser Ile Thr Glu Val
 290 295 300
 Thr Lys Arg Pro Leu Thr Ala Ala Thr Leu Phe Lys Asn Ser Met Ile
 305 310 315 320
 Ala Leu Val Asp Asn Leu Ala Ser Lys Glu Pro Tyr Tyr Val Arg Cys
 325 330 335
 Ile Lys Pro Asn Asp Lys Lys Ser Pro Gln Ile Phe Asp Asp Glu Arg
 340 345 350
 Cys Arg His Gln Val Glu Tyr Leu Gly Leu Leu Glu Asn Val Arg Val
 355 360 365
 Arg Arg Ala Gly Phe Ala Phe Arg Gln Thr Tyr Glu Lys Phe Leu His
 370 375 380
 Arg Tyr Lys Met Ile Ser Glu Phe Thr Trp Pro Asn His Asp Leu Pro
 385 390 395 400

Ser Asp Lys Glu Ala Val Lys Lys Leu Ile Glu Arg Cys Gly Phe Gln
 405 410 415
 Asp Asp Val Ala Tyr Gly Lys Thr Lys Ile Phe Ile Arg Thr Pro Arg
 420 425 430
 Thr Leu Phe Thr Leu Glu Glu Leu Arg Ala Gln Met Leu Ile Arg Ile
 435 440 445
 Val Leu Phe Leu Gln Lys Val Trp Arg Gly Thr Leu Ala Arg Met Arg
 450 455 460
 Tyr Lys Arg Thr Lys Ala Ala Leu Thr Ile Ile Arg Tyr Tyr Arg Arg
 465 470 475 480
 Tyr Lys Val Lys Ser Tyr Ile His Glu Val Ala Arg Arg Phe His Gly
 485 490 495
 Val Lys Thr Met Arg Asp Tyr Gly Lys His Val Lys Trp Pro Ser Pro
 500 505 510
 Pro Lys Val Leu Arg Arg Phe Glu Glu Ala Leu Gln Thr Ile Phe Asn
 515 520 525
 Arg Trp Arg Ala Ser Gln Leu Ile Lys Ser Ile Pro Ala Ser Asp Leu
 530 535 540
 Pro Gln Val Arg Ala Lys Val Ala Ala Val Glu Met Leu Lys Gly Gln
 545 550 555 560
 Arg Ala Asp Leu Gly Leu Gln Arg Ala Trp Glu Gly Asn Tyr Leu Ala
 565 570 575
 Ser Lys Pro Asp Thr Pro Gln Thr Ser Gly Thr Phe Val Pro Val Ala
 580 585 590
 Asn Glu Leu Lys Arg Lys Asp Lys Tyr Met Asn Val Leu Phe Ser Cys
 595 600 605
 His Val Arg Lys Val Asn Arg Phe Ser Lys Val Glu Asp Arg Ala Ile
 610 615 620
 Phe Val Thr Asp Arg His Leu Tyr Lys Met Asp Pro Thr Lys Gln Tyr
 625 630 635 640
 Lys Val Met Lys Thr Ile Pro Leu Tyr Asn Leu Thr Gly Leu Ser Val
 645 650 655
 Ser Asn Gly Lys Asp Gln Leu Val Val Phe His Thr Lys Asp Asn Lys
 660 665 670
 Asp Leu Ile Val Cys Leu Phe Ser Lys Gln Pro Thr His Glu Ser Arg
 675 680 685
 Ile Gly Glu Leu Val Gly Val Leu Val Asn His Phe Lys Ser Glu Lys
 690 695 700
 Arg His Leu Gln Val Asn Val Thr Asn Pro Val Gln Cys Ser Leu His
 705 710 715 720
 Gly Lys Lys Cys Thr Val Ser Val Glu Thr Arg Leu Asn Gln Pro Gln
 725 730 735
 Pro Asp Phe Thr Lys Asn Arg Ser Gly Phe Ile Leu Ser Val Pro Gly
 740 745 750
 Asn *
 753

<210> 1802
 <211> 2167
 <212> PRT
 <213> Homo sapiens

<400> 1802
 Met Gln Ile Glu Gln Leu Glu Arg Tyr Ile Gln Arg Tyr Leu Val Tyr
 1 5 10 15
 Ala Ile Leu Trp Ser Leu Ser Gly Asp Ser Arg Leu Lys Met Arg Ala
 20 25 30
 Glu Leu Gly Glu Tyr Ile Arg Arg Ile Thr Thr Val Pro Leu Pro Thr
 35 40 45
 Ala Pro Asn Ile Pro Ile Ile Asp Tyr Glu Val Ser Ile Ser Gly Glu
 50 55 60

Trp	Ser	Pro	Trp	Gln	Ala	Lys	Val	Pro	Gln	Ile	Glu	Val	Glu	Thr	His
65					70					75					80
Lys	Val	Ala	Ala	Pro	Asp	Val	Val	Val	Pro	Thr	Leu	Asp	Thr	Val	Arg
				85					90					95	
His	Glu	Ala	Leu	Leu	Tyr	Thr	Trp	Leu	Ala	Glu	His	Lys	Pro	Leu	Val
			100					105					110		
Leu	Cys	Gly	Pro	Pro	Gly	Ser	Gly	Lys	Thr	Met	Thr	Leu	Phe	Ser	Ala
		115					120						125		
Leu	Arg	Ala	Leu	Pro	Asp	Met	Glu	Val	Val	Gly	Leu	Asn	Phe	Ser	Ser
		130				135						140			
Ala	Thr	Thr	Pro	Glu	Leu	Leu	Lys	Thr	Phe	Asp	His	Tyr	Cys	Glu	
145					150					155					160
Tyr	Arg	Arg	Thr	Pro	Asn	Gly	Val	Val	Leu	Ala	Pro	Val	Gln	Leu	Gly
				165					170					175	
Lys	Trp	Leu	Val	Leu	Phe	Cys	Asp	Glu	Ile	Asn	Leu	Pro	Asp	Met	Asp
			180					185						190	
Lys	Tyr	Gly	Thr	Gln	Arg	Val	Ile	Ser	Phe	Ile	Arg	Gln	Met	Val	Glu
		195					200					205			
His	Gly	Gly	Phe	Tyr	Arg	Thr	Ser	Asp	Gln	Thr	Trp	Val	Lys	Leu	Glu
		210				215						220			
Arg	Ile	Gln	Phe	Val	Gly	Ala	Cys	Asn	Pro	Pro	Thr	Asp	Pro	Gly	Arg
225					230					235					240
Lys	Pro	Leu	Ser	His	Arg	Phe	Leu	Arg	His	Val	Pro	Val	Val	Tyr	Val
				245					250					255	
Asp	Tyr	Pro	Gly	Pro	Ala	Ser	Leu	Thr	Gln	Ile	Tyr	Gly	Thr	Phe	Asn
			260					265					270		
Arg	Ala	Met	Leu	Arg	Leu	Ile	Pro	Ser	Leu	Arg	Thr	Tyr	Ala	Glu	Pro
		275					280						285		
Leu	Thr	Ala	Ala	Met	Val	Glu	Phe	Tyr	Thr	Met	Ser	Gln	Glu	Arg	Phe
		290				295						300			
Thr	Gln	Asp	Thr	Gln	Pro	His	Tyr	Ile	Tyr	Ser	Pro	Arg	Glu	Met	Thr
305					310					315					320
Arg	Trp	Val	Arg	Gly	Ile	Phe	Glu	Ala	Leu	Arg	Pro	Leu	Glu	Thr	Leu
				325					330					335	
Pro	Val	Glu	Gly	Leu	Ile	Arg	Ile	Trp	Ala	His	Glu	Ala	Leu	Arg	Leu
			340					345					350		
Phe	Gln	Asp	Arg	Leu	Val	Glu	Asp	Glu	Glu	Arg	Arg	Trp	Thr	Asp	Glu
		355					360					365			
Asn	Ile	Asp	Thr	Val	Ala	Leu	Lys	His	Phe	Pro	Asn	Ile	Asp	Arg	Glu
		370				375					380				
Lys	Ala	Met	Ser	Arg	Pro	Ile	Leu	Tyr	Ser	Asn	Trp	Leu	Ser	Lys	Asp
385					390					395					400
Tyr	Ile	Pro	Val	Asp	Gln	Glu	Glu	Leu	Arg	Asp	Tyr	Val	Lys	Ala	Arg
				405					410					415	
Leu	Lys	Val	Phe	Tyr	Glu	Glu	Glu	Leu	Asp	Val	Pro	Leu	Val	Leu	Phe
			420					425					430		
Asn	Glu	Val	Leu	Asp	His	Val	Leu	Arg	Ile	Asp	Arg	Ile	Phe	Arg	Gln
		435					440					445			
Pro	Gln	Gly	His	Leu	Leu	Leu	Ile	Gly	Val	Ser	Gly	Ala	Gly	Lys	Thr
		450				455					460				
Thr	Leu	Ser	Arg	Phe	Val	Ala	Trp	Met	Asn	Gly	Leu	Ser	Val	Tyr	Gln
465					470					475					480
Ile	Lys	Val	His	Arg	Lys	Tyr	Thr	Gly	Glu	Asp	Phe	Asp	Glu	Asp	Leu
				485					490					495	
Arg	Thr	Val	Leu	Arg	Arg	Ser	Gly	Cys	Lys	Asn	Glu	Lys	Ile	Ala	Phe
			500					505					510		
Ile	Met	Asp	Glu	Ser	Asn	Val	Leu	Asp	Ser	Gly	Phe	Leu	Glu	Arg	Met
		515					520					525			
Asn	Thr	Leu	Leu	Ala	Asn	Gly	Glu	Val	Pro	Gly	Leu	Phe	Glu	Gly	Asp
		530				535					540				
Glu	Tyr	Ala	Thr	Leu	Met	Thr	Gln	Cys	Lys	Glu	Gly	Ala	Gln	Lys	Glu
545					550					555					560
Gly	Leu	Met	Leu	Asp	Ser	His	Glu	Glu	Leu	Tyr	Lys	Trp	Phe	Thr	Ser
				565					570					575	

Gln	Val	Ile	Arg	Asn	Leu	His	Val	Val	Phe	Thr	Met	Asn	Pro	Ser	Ser
			580					585					590		
Glu	Gly	Leu	Lys	Asp	Arg	Ala	Ala	Thr	Ser	Pro	Ala	Leu	Phe	Asn	Arg
		595					600					605			
Cys	Val	Leu	Asn	Trp	Phe	Gly	Asp	Trp	Ser	Thr	Glu	Ala	Leu	Tyr	Gln
	610					615					620				
Val	Gly	Lys	Glu	Phe	Thr	Ser	Lys	Met	Asp	Leu	Glu	Lys	Pro	Asn	Tyr
625					630					635					640
Ile	Val	Pro	Asp	Tyr	Met	Pro	Val	Val	Tyr	Asp	Lys	Leu	Pro	Gln	Pro
			645						650					655	
Pro	Ser	His	Arg	Glu	Ala	Ile	Val	Asn	Ser	Cys	Val	Phe	Val	His	Gln
			660					665					670		
Thr	Leu	His	Gln	Ala	Asn	Ala	Arg	Leu	Ala	Lys	Arg	Gly	Gly	Arg	Thr
		675					680					685			
Met	Ala	Ile	Thr	Pro	Arg	His	Tyr	Leu	Asp	Phe	Ile	Asn	His	Tyr	Ala
	690					695					700				
Asn	Leu	Phe	His	Glu	Lys	Arg	Ser	Glu	Leu	Glu	Glu	Gln	Gln	Met	His
705					710					715					720
Leu	Asn	Val	Gly	Leu	Arg	Lys	Ile	Lys	Glu	Thr	Val	Asp	Gln	Val	Glu
			725						730					735	
Glu	Leu	Arg	Arg	Asp	Leu	Arg	Ile	Lys	Ser	Gln	Glu	Leu	Glu	Val	Lys
			740					745					750		
Asn	Ala	Ala	Ala	Asn	Asp	Lys	Leu	Lys	Lys	Met	Val	Lys	Asp	Gln	Gln
		755					760					765			
Glu	Ala	Glu	Lys	Lys	Lys	Val	Met	Ser	Gln	Glu	Ile	Gln	Glu	Gln	Leu
	770					775					780				
His	Lys	Gln	Gln	Glu	Val	Ile	Ala	Asp	Lys	Gln	Met	Ser	Val	Lys	Glu
785					790					795					800
Asp	Leu	Asp	Lys	Val	Glu	Pro	Ala	Val	Ile	Glu	Ala	Gln	Asn	Ala	Val
				805					810					815	
Lys	Ser	Ile	Lys	Lys	Gln	His	Leu	Val	Glu	Val	Arg	Ser	Met	Ala	Asn
			820					825					830		
Pro	Pro	Ala	Ala	Val	Lys	Leu	Ala	Leu	Glu	Ser	Ile	Cys	Leu	Leu	Leu
		835					840					845			
Gly	Glu	Ser	Thr	Thr	Asp	Trp	Lys	Gln	Ile	Arg	Ser	Ile	Ile	Met	Arg
	850					855					860				
Glu	Asn	Phe	Ile	Pro	Thr	Ile	Val	Asn	Phe	Ser	Ala	Glu	Glu	Ile	Ser
865					870					875					880
Asp	Ala	Ile	Arg	Glu	Lys	Met	Lys	Lys	Asn	Tyr	Met	Ser	Asn	Pro	Ser
				885					890					895	
Tyr	Asn	Tyr	Glu	Ile	Val	Asn	Arg	Ala	Ser	Leu	Ala	Cys	Gly	Pro	Met
			900					905					910		
Val	Lys	Trp	Ala	Ile	Ala	Gln	Leu	Asn	Tyr	Ala	Asp	Met	Leu	Lys	Arg
		915					920					925			
Val	Glu	Pro	Leu	Arg	Asn	Glu	Leu	Gln	Lys	Leu	Glu	Asp	Asp	Ala	Lys
	930					935					940				
Asp	Asn	Gln	Gln	Lys	Ala	Asn	Glu	Val	Glu	Gln	Met	Ile	Arg	Asp	Leu
945					950					955					960
Glu	Ala	Ser	Ile	Ala	Arg	Tyr	Lys	Glu	Glu	Tyr	Ala	Val	Leu	Ile	Ser
				965					970					975	
Glu	Ala	Gln	Ala	Ile	Lys	Ala	Asp	Leu	Ala	Ala	Val	Glu	Ala	Lys	Val
			980					985					990		
Asn	Arg	Ser	Thr	Ala	Leu	Leu	Lys	Ser	Leu	Ser	Ala	Glu	Arg	Glu	Arg
			995				1000					1005			
Trp	Glu	Lys	Thr	Ser	Glu	Thr	Phe	Lys	Asn	Gln	Met	Ser	Thr	Ile	Ala
	1010					1015					1020				
Gly	Asp	Cys	Leu	Leu	Ser	Ala	Ala	Phe	Ile	Ala	Tyr	Ala	Gly	Tyr	Phe
1025					1030					1035					1040
Asp	Gln	Gln	Met	Arg	Gln	Asn	Leu	Phe	Thr	Thr	Trp	Ser	His	His	Leu
				1045					1050				1055		
Gln	Gln	Ala	Asn	Ile	Gln	Phe	Arg	Thr	Asp	Ile	Ala	Arg	Thr	Glu	Tyr
		1060					1065						1070		
Leu	Ser	Asn	Ala	Asp	Glu	Arg	Leu	Arg	Trp	Gln	Ala	Ser	Ser	Leu	Pro
		1075					1080					1085			

Ala Asp Asp Leu Cys Thr Glu Asn Ala Ile Met Leu Lys Arg Phe Asn
1090 1095 1100
Arg Tyr Pro Leu Ile Ile Asp Pro Ser Gly Gln Ala Thr Glu Phe Ile
1105 1110 1115 1120
Met Asn Glu Tyr Lys Asp Arg Lys Ile Thr Arg Thr Ser Phe Leu Asp
1125 1130 1135
Asp Ala Phe Arg Lys Asn Leu Glu Ser Ala Leu Arg Phe Gly Asn Pro
1140 1145 1150
Leu Leu Val Gln Asp Val Glu Ser Tyr Asp Pro Val Leu Asn Pro Val
1155 1160 1165
Leu Asn Arg Glu Val Arg Arg Thr Gly Gly Arg Val Leu Ile Thr Leu
1170 1175 1180
Gly Asp Gln Asp Ile Asp Leu Ser Pro Ser Phe Val Ile Phe Leu Ser
1185 1190 1195 1200
Thr Arg Asp Pro Thr Val Glu Phe Pro Pro Asp Leu Cys Ser Arg Val
1205 1210 1215
Thr Phe Val Asn Phe Thr Val Thr Arg Ser Ser Leu Gln Ser Gln Cys
1220 1225 1230
Leu Asn Glu Val Leu Lys Ala Glu Arg Pro Asp Val Asp Glu Lys Arg
1235 1240 1245
Ser Asp Leu Leu Lys Leu Gln Gly Glu Phe Gln Leu Arg Leu Arg Gln
1250 1255 1260
Leu Glu Lys Ser Leu Leu Gln Ala Leu Asn Glu Val Lys Gly Arg Ile
1265 1270 1275 1280
Leu Asp Asp Asp Thr Ile Ile Thr Thr Leu Glu Asn Leu Lys Arg Glu
1285 1290 1295
Ala Ala Glu Val Thr Arg Lys Val Glu Glu Thr Asp Ile Val Met Gln
1300 1305 1310
Glu Val Glu Thr Val Ser Gln Gln Tyr Leu Pro Leu Ser Thr Ala Cys
1315 1320 1325
Ser Ser Ile Tyr Phe Thr Met Glu Ser Leu Lys Gln Ile His Phe Leu
1330 1335 1340
Tyr Gln Tyr Ser Leu Gln Phe Phe Leu Asp Ile Tyr His Asn Val Leu
1345 1350 1355 1360
Tyr Glu Asn Pro Asn Leu Lys Gly Val Thr Asp His Thr Gln Arg Leu
1365 1370 1375
Ser Ile Ile Thr Lys Asp Leu Phe Gln Val Ala Phe Asn Arg Val Ala
1380 1385 1390
Arg Gly Met Leu His Gln Asp His Ile Thr Phe Ala Met Leu Leu Ala
1395 1400 1405
Arg Ile Lys Leu Lys Gly Thr Val Gly Glu Pro Thr Tyr Asp Ala Glu
1410 1415 1420
Phe Gln His Phe Leu Arg Gly Asn Glu Ile Val Leu Ser Ala Gly Ser
1425 1430 1435 1440
Thr Pro Arg Ile Gln Gly Leu Thr Val Glu Gln Ala Glu Ala Val Val
1445 1450 1455
Arg Leu Ser Cys Leu Pro Ala Phe Lys Asp Leu Ile Ala Lys Val Gln
1460 1465 1470
Ala Asp Glu Gln Phe Gly Ile Trp Leu Asp Ser Ser Ser Pro Glu Gln
1475 1480 1485
Thr Val Pro Tyr Leu Trp Ser Glu Glu Thr Pro Ala Thr Pro Ile Gly
1490 1495 1500
Gln Ala Ile His Arg Leu Leu Leu Ile Gln Ala Phe Arg Pro Asp Arg
1505 1510 1515 1520
Leu Leu Ala Met Ala His Met Phe Val Ser Thr Asn Leu Gly Glu Ser
1525 1530 1535
Phe Met Ser Ile Met Glu Gln Pro Leu Asp Leu Thr His Ile Val Gly
1540 1545 1550
Thr Glu Val Lys Pro Asn Thr Pro Val Leu Met Cys Ser Val Pro Gly
1555 1560 1565
Tyr Asp Ala Ser Gly His Val Glu Asp Leu Ala Ala Glu Gln Asn Thr
1570 1575 1580
Gln Ile Thr Ser Ile Ala Ile Gly Ser Ala Glu Gly Phe Asn Gln Ala
1585 1590 1595 1600

Asp Lys Ala Ile Asn Thr Ala Val Lys Ser Gly Arg Trp Val Met Leu
 1605 1610 1615
 Lys Asn Val His Leu Ala Pro Gly Trp Leu Met Gln Leu Glu Lys Lys
 1620 1625 1630
 Leu His Ser Leu Gln Pro His Ala Cys Phe Arg Leu Phe Leu Thr Met
 1635 1640 1645
 Glu Ile Asn Pro Lys Val Pro Val Asn Leu Leu Arg Ala Gly Arg Ile
 1650 1655 1660
 Phe Val Phe Glu Pro Pro Pro Gly Val Lys Ala Asn Met Leu Arg Thr
 1665 1670 1675 1680
 Phe Ser Ser Ile Pro Val Ser Arg Ile Cys Lys Ser Pro Asn Glu Arg
 1685 1690 1695
 Ala Arg Leu Tyr Phe Leu Leu Ala Trp Phe His Ala Ile Ile Gln Glu
 1700 1705 1710
 Arg Leu Arg Tyr Ala Pro Leu Gly Trp Ser Lys Lys Tyr Glu Phe Gly
 1715 1720 1725
 Glu Ser Asp Leu Arg Ser Ala Cys Asp Thr Val Asp Thr Trp Leu Asp
 1730 1735 1740
 Asp Thr Ala Lys Gly Arg Gln Asn Ile Ser Pro Asp Lys Ile Pro Trp
 1745 1750 1755 1760
 Ser Ala Leu Lys Thr Leu Met Ala Gln Ser Ile Tyr Gly Gly Arg Val
 1765 1770 1775
 Asp Asn Glu Phe Asp Gln Arg Leu Leu Asn Thr Phe Leu Glu Arg Leu
 1780 1785 1790
 Phe Thr Thr Arg Ser Phe Asp Ser Glu Phe Lys Leu Ala Cys Lys Val
 1795 1800 1805
 Asp Gly His Lys Asp Ile Gln Met Pro Asp Gly Ile Arg Arg Glu Glu
 1810 1815 1820
 Phe Val Gln Trp Val Glu Leu Leu Pro Asp Thr Gln Thr Pro Ser Trp
 1825 1830 1835 1840
 Leu Gly Leu Pro Asn Asn Ala Glu Arg Val Leu Leu Thr Thr Gln Gly
 1845 1850 1855
 Val Asp Met Ile Ser Lys Met Leu Lys Met Gln Met Leu Glu Asp Glu
 1860 1865 1870
 Asp Asp Leu Ala Tyr Ala Glu Thr Glu Lys Lys Thr Arg Thr Asp Ser
 1875 1880 1885
 Thr Ser Asp Gly Arg Pro Ala Trp Met Arg Thr Leu His Thr Thr Ala
 1890 1895 1900
 Ser Asn Trp Leu His Leu Ile Pro Gln Thr Leu Ser His Leu Lys Arg
 1905 1910 1915 1920
 Thr Val Glu Asn Ile Lys Asp Pro Leu Phe Arg Phe Phe Glu Arg Glu
 1925 1930 1935
 Val Lys Met Gly Ala Lys Leu Leu Gln Asp Val Arg Gln Asp Leu Ala
 1940 1945 1950
 Asp Val Val Gln Val Cys Glu Gly Lys Lys Lys Gln Thr Asn Tyr Leu
 1955 1960 1965
 Arg Thr Leu Ile Asn Glu Leu Val Lys Gly Ile Leu Pro Arg Ser Trp
 1970 1975 1980
 Ser His Tyr Thr Val Pro Ala Gly Met Thr Val Ile Gln Trp Val Ser
 1985 1990 1995 2000
 Asp Phe Ser Glu Arg Ile Lys Gln Leu Gln Asn Ile Ser Leu Ala Ala
 2005 2010 2015
 Ala Ser Gly Gly Ala Lys Glu Leu Lys Asn Ile His Val Cys Leu Gly
 2020 2025 2030
 Gly Leu Phe Val Pro Glu Ala Tyr Ile Thr Ala Thr Arg Gln Tyr Val
 2035 2040 2045
 Ala Gln Ala Asn Ser Trp Ser Leu Glu Glu Leu Cys Leu Glu Val Asn
 2050 2055 2060
 Val Thr Thr Ser Gln Gly Ala Thr Leu Asp Ala Cys Ser Phe Gly Val
 2065 2070 2075 2080
 Thr Gly Leu Lys Leu Gln Gly Ala Thr Cys Asn Asn Asn Lys Leu Ser
 2085 2090 2095
 Leu Ser Asn Ala Ile Ser Thr Ala Leu Pro Leu Thr Gln Leu Arg Trp
 2100 2105 2110

Val Lys Gln Thr Asn Thr Glu Lys Lys Ala Ser Val Val Thr Leu Pro
 2115 2120 2125
 Val Tyr Leu Asn Phe Thr Arg Ala Asp Leu Ile Phe Thr Val Asp Phe
 2130 2135 2140
 Glu Ile Ala Thr Lys Glu Asp Pro Arg Ser Phe Tyr Glu Arg Gly Val
 2145 2150 2155 2160
 Ala Val Leu Cys Thr Glu *
 21652166

<210> 1803
 <211> 774
 <212> PRT
 <213> Homo sapiens

<400> 1803
 Met Gln Val Ser Ser Ala Glu Val Arg Ile Gly Pro Met Arg Leu Thr
 1 5 10 15
 Gln Asp Pro Ile Gln Val Leu Leu Ile Phe Ala Lys Glu Asp Ser Gln
 20 25 30
 Ser Asp Gly Phe Trp Trp Ala Cys Asp Arg Ala Gly Tyr Arg Cys Asn
 35 40 45
 Ile Ala Arg Thr Pro Glu Ser Ala Leu Glu Cys Phe Leu Asp Lys His
 50 55 60
 His Glu Ile Ile Val Ile Asp His Arg Gln Thr Gln Asn Phe Asp Ala
 65 70 75 80
 Glu Ala Val Cys Arg Ser Ile Arg Ala Thr Asn Pro Ser Glu His Thr
 85 90 95
 Val Ile Leu Ala Val Val Ser Arg Val Ser Asp Asp His Glu Glu Ala
 100 105 110
 Ser Val Leu Pro Leu Leu His Ala Gly Phe Asn Arg Arg Phe Met Glu
 115 120 125
 Asn Ser Ser Ile Ile Ala Cys Tyr Asn Glu Leu Ile Gln Ile Glu His
 130 135 140
 Gly Glu Val Arg Ser Gln Phe Lys Leu Arg Ala Cys Asn Ser Val Phe
 145 150 155 160
 Thr Ala Leu Asp His Cys His Glu Ala Ile Glu Ile Thr Ser Asp Asp
 165 170 175
 His Val Ile Gln Tyr Val Asn Pro Ala Phe Glu Arg Met Met Gly Tyr
 180 185 190
 His Lys Gly Glu Leu Leu Gly Lys Glu Leu Ala Asp Leu Pro Lys Ser
 195 200 205
 Asp Lys Asn Arg Ala Asp Leu Leu Asp Thr Ile Asn Thr Cys Ile Lys
 210 215 220
 Lys Gly Lys Glu Trp Gln Gly Val Tyr Tyr Ala Arg Arg Lys Ser Gly
 225 230 235 240
 Asp Ser Ile Gln Gln His Val Lys Ile Thr Pro Val Ile Gly Gln Gly
 245 250 255
 Gly Lys Ile Arg His Phe Val Ser Leu Lys Lys Leu Cys Cys Thr Thr
 260 265 270
 Asp Asn Asn Lys Gln Ile His Lys Ile His Arg Asp Ser Gly Asp Asn
 275 280 285
 Ser Gln Thr Glu Pro His Ser Phe Arg Tyr Lys Asn Arg Arg Lys Glu
 290 295 300
 Ser Ile Asp Val Lys Ser Ile Ser Ser Arg Gly Ser Asp Ala Pro Ser
 305 310 315 320
 Leu Gln Asn Arg Arg Tyr Pro Ser Met Ala Arg Ile His Ser Met Thr
 325 330 335
 Ile Glu Ala Pro Ile Thr Lys Val Ile Asn Ile Ile Asn Ala Ala Gln
 340 345 350
 Glu Asn Ser Pro Val Thr Val Ala Glu Ala Leu Asp Arg Val Leu Glu
 355 360 365

Ile	Leu	Arg	Thr	Thr	Glu	Leu	Tyr	Ser	Pro	Gln	Leu	Gly	Thr	Lys	Asp
370						375					380				
Glu	Asp	Pro	His	Thr	Ser	Asp	Leu	Val	Gly	Gly	Leu	Met	Thr	Asp	Gly
385					390					395					400
Leu	Arg	Arg	Leu	Ser	Gly	Asn	Glu	Tyr	Val	Phe	Thr	Lys	Asn	Val	His
				405					410					415	
Gln	Ser	His	Ser	His	Leu	Ala	Met	Pro	Ile	Thr	Ile	Asn	Asp	Val	Pro
			420				425						430		
Pro	Cys	Ile	Ser	Gln	Leu	Leu	Asp	Asn	Glu	Glu	Ser	Trp	Asp	Phe	Asn
	435						440					445			
Ile	Phe	Glu	Leu	Glu	Ala	Ile	Thr	His	Lys	Arg	Pro	Leu	Val	Tyr	Leu
450						455					460				
Gly	Leu	Lys	Val	Phe	Ser	Arg	Phe	Gly	Val	Cys	Glu	Phe	Leu	Asn	Cys
465					470					475					480
Ser	Glu	Thr	Thr	Leu	Arg	Ala	Trp	Phe	Gln	Val	Ile	Glu	Ala	Asn	Tyr
				485					490					495	
His	Ser	Ser	Asn	Ala	Tyr	His	Asn	Ser	Thr	His	Ala	Ala	Asp	Val	Leu
			500				505						510		
His	Ala	Thr	Ala	Phe	Phe	Leu	Gly	Lys	Glu	Arg	Val	Lys	Gly	Ser	Leu
	515						520					525			
Asp	Gln	Leu	Asp	Glu	Val	Ala	Ala	Leu	Ile	Ala	Ala	Thr	Val	His	Asp
530						535					540				
Val	Asp	His	Pro	Gly	Arg	Thr	Asn	Ser	Phe	Leu	Cys	Asn	Ala	Gly	Ser
545				550					555						560
Glu	Leu	Ala	Val	Leu	Tyr	Asn	Asp	Thr	Ala	Val	Leu	Glu	Ser	His	His
				565				570						575	
Thr	Ala	Leu	Ala	Phe	Gln	Leu	Thr	Val	Lys	Asp	Thr	Lys	Cys	Asn	Ile
			580					585					590		
Phe	Lys	Asn	Ile	Asp	Arg	Asn	His	Tyr	Arg	Thr	Leu	Arg	Gln	Ala	Ile
	595					600						605			
Ile	Asp	Met	Val	Leu	Ala	Thr	Glu	Met	Thr	Lys	His	Phe	Glu	His	Val
610						615					620				
Asn	Lys	Phe	Val	Asn	Ser	Ile	Asn	Lys	Pro	Met	Ala	Ala	Glu	Ile	Glu
625				630					635						640
Gly	Ser	Asp	Cys	Glu	Cys	Asn	Pro	Ala	Gly	Lys	Asn	Phe	Pro	Glu	Asn
				645					650					655	
Gln	Ile	Leu	Ile	Lys	Arg	Met	Met	Ile	Lys	Cys	Ala	Asp	Val	Ala	Asn
			660					665					670		
Pro	Cys	Arg	Pro	Leu	Asp	Leu	Cys	Ile	Glu	Trp	Ala	Gly	Arg	Ile	Ser
	675					680						685			
Glu	Glu	Tyr	Phe	Ala	Gln	Thr	Asp	Glu	Glu	Lys	Arg	Gln	Gly	Leu	Pro
690						695					700				
Val	Val	Met	Pro	Val	Phe	Asp	Arg	Asn	Thr	Cys	Ser	Ile	Pro	Lys	Ser
705				710						715					720
Gln	Ile	Ser	Phe	Ile	Asp	Tyr	Phe	Ile	Thr	Asp	Met	Phe	Asp	Ala	Trp
				725					730				735		
Asp	Ala	Phe	Ala	His	Leu	Pro	Ala	Leu	Met	Gln	His	Leu	Ala	Asp	Asn
			740					745					750		
Tyr	Lys	His	Trp	Lys	Thr	Leu	Asp	Asp	Leu	Lys	Cys	Lys	Ser	Leu	Arg
	755					760						765			
Leu	Pro	Ser	Asp	Ser	*										
770				773											

<210> 1804

<211> 273

<212> PRT

<213> Homo sapiens

<400> 1804

Met	Ala	Leu	Leu	Thr	Arg	Thr	Leu	Glu	Glu	Ala	Ser	Glu	Gln	Ile	Arg
1				5					10					15	

Met	Asn	Arg	Ser	Ala	Lys	Tyr	Asn	Leu	Glu	Lys	Asp	Leu	Lys	Asp	Lys
			20					25					30		
Phe	Val	Ala	Leu	Thr	Ile	Asp	Asp	Ile	Cys	Phe	Ser	Leu	Asn	Asn	Asn
		35					40					45			
Ser	Pro	Asn	Ile	Arg	Tyr	Ser	Glu	Asn	Ala	Val	Arg	Ile	Glu	Pro	Asn
	50					55					60				
Ser	Val	Ser	Leu	Glu	Asp	Trp	Leu	Asp	Phe	Ser	Ser	Thr	Asn	Val	Glu
65					70					75					80
Lys	Ala	Asp	Lys	Gln	Arg	Asn	Asn	Ser	Leu	Met	Leu	Lys	Ala	Leu	Val
				85					90					95	
Asp	Arg	Ile	Leu	Ser	Met	Thr	Ala	Asn	Asp	Leu	Arg	Lys	Gln	Cys	Asp
			100					105					110		
Val	Val	His	Thr	Ala	Phe	Lys	Asn	Gly	Leu	Lys	Asp	Thr	Lys	Asp	Ala
		115					120					125			
Arg	Asp	Lys	Leu	Ala	Asp	His	Leu	Ala	Lys	Val	Met	Glu	Glu	Ile	Ala
	130					135					140				
Ser	Gln	Glu	Lys	Asn	Ile	Thr	Ala	Leu	Glu	Lys	Ala	Ile	Leu	Asp	Gln
145					150					155					160
Glu	Gly	Pro	Ala	Lys	Val	Ala	His	Thr	Arg	Leu	Glu	Thr	Arg	Thr	His
				165				170						175	
Arg	Pro	Asn	Val	Glu	Leu	Cys	Arg	Asp	Val	Ala	Gln	Tyr	Arg	Leu	Met
			180					185					190		
Lys	Glu	Val	Gln	Glu	Ile	Thr	His	Asn	Val	Ala	Arg	Leu	Lys	Glu	Thr
		195					200					205			
Leu	Ala	Gln	Ala	Gln	Ala	Glu	Leu	Lys	Gly	Leu	His	Arg	Arg	Gln	Leu
	210					215					220				
Ala	Leu	Gln	Glu	Glu	Ile	Gln	Val	Lys	Glu	Asn	Thr	Ile	Tyr	Ile	Asp
225					230					235					240
Glu	Val	Leu	Cys	Met	Gln	Met	Arg	Lys	Ser	Ile	Pro	Leu	Arg	Asp	Gly
				245					250					255	
Glu	Asp	His	Gly	Val	Trp	Ala	Gly	Gly	Leu	Arg	Pro	Asp	Ala	Val	Cys
			260					265					270		272

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<210> 1805
 <211> 179
 <212> PRT
 <213> Homo sapiens

<400> 1805

Met	Leu	Leu	Gly	Gly	Arg	Lys	Thr	Thr	Asp	Ile	Pro	Leu	Glu	Gly	Tyr
1				5					10					15	
Leu	Leu	Ser	Pro	Ile	Gln	Arg	Ile	Cys	Lys	Tyr	Pro	Leu	Leu	Leu	Lys
			20					25					30		
Glu	Leu	Ala	Lys	Arg	Thr	Pro	Gly	Lys	His	Pro	Asp	His	Pro	Ala	Val
		35					40					45			
Gln	Ser	Ala	Leu	Gln	Ala	Met	Lys	Thr	Val	Cys	Ser	Asn	Ile	Asn	Glu
	50					55					60				
Thr	Lys	Arg	Gln	Met	Glu	Lys	Leu	Glu	Ala	Leu	Glu	Gln	Leu	Gln	Ser
65					70					75					80
His	Ile	Glu	Gly	Trp	Glu	Gly	Ser	Asn	Leu	Thr	Asp	Ile	Cys	Thr	Gln
				85					90					95	
Leu	Leu	Leu	Gln	Gly	Thr	Leu	Leu	Lys	Ile	Ser	Ala	Gly	Asn	Ile	Gln
			100					105					110		
Glu	Arg	Ala	Phe	Phe	Leu	Phe	Asp	Asn	Leu	Leu	Val	Tyr	Cys	Lys	Arg
		115					120					125			
Lys	Ser	Arg	Val	Thr	Gly	Ser	Lys	Lys	Ser	Thr	Lys	Arg	Thr	Lys	Ser
	130					135					140				
Ile	Asn	Gly	Ser	Leu	Tyr	Ile	Phe	Arg	Gly	Arg	Ile	Asn	Thr	Glu	Val
145					150					155					160

Met Glu Val Glu Asn Val Glu Asp Gly Thr Gly Ser Pro Ser Pro Ser
 165 170 175
 Leu Ala *
 178

<210> 1806
 <211> 876
 <212> PRT
 <213> Homo sapiens

<400> 1806
 Met His Asp Ala Phe Glu Pro Val Pro Ile Leu Glu Lys Leu Pro Leu
 1 5 10 15
 Gln Ile Asp Cys Leu Ala Ala Trp Glu Glu Trp Leu Leu Val Gly Thr
 20 25 30
 Lys Gln Gly His Leu Leu Leu Tyr Arg Ile Arg Lys Asp Val Gly Cys
 35 40 45
 Asn Arg Phe Glu Val Thr Leu Glu Lys Ser Asn Lys Asn Phe Ser Lys
 50 55 60
 Lys Ile Gln Gln Ile His Val Val Ser Gln Phe Lys Ile Leu Val Ser
 65 70 75 80
 Leu Leu Glu Asn Asn Ile Tyr Val His Asp Leu Leu Thr Phe Gln Gln
 85 90 95
 Ile Thr Thr Val Ser Lys Ala Lys Gly Ala Ser Leu Phe Thr Cys Asp
 100 105 110
 Leu Gln His Thr Glu Thr Gly Glu Glu Val Leu Arg Met Cys Val Ala
 115 120 125
 Val Lys Lys Arg Leu Gln Leu Tyr Phe Trp Lys Asp Arg Glu Phe His
 130 135 140
 Glu Leu Gln Gly Asp Phe Ser Val Pro Asp Val Pro Lys Ser Met Ala
 145 150 155 160
 Trp Cys Glu Asn Ser Ile Cys Val Gly Phe Lys Arg Asp Tyr Tyr Leu
 165 170 175
 Ile Arg Val Asp Gly Lys Gly Ser Ile Lys Glu Leu Phe Pro Thr Gly
 180 185 190
 Lys Gln Leu Glu Pro Leu Val Ala Pro Leu Ala Asp Gly Lys Val Ala
 195 200 205
 Val Gly Gln Asp Asp Leu Thr Val Val Leu Asn Glu Glu Gly Ile Cys
 210 215 220
 Thr Gln Lys Cys Ala Leu Asn Trp Thr Asp Ile Pro Val Ala Met Glu
 225 230 235 240
 His Gln Pro Pro Tyr Ile Ile Ala Val Leu Pro Arg Tyr Val Glu Ile
 245 250 255
 Arg Thr Phe Glu Pro Arg Leu Leu Val Gln Ser Ile Glu Leu Gln Arg
 260 265 270
 Pro Arg Phe Ile Thr Ser Gly Gly Ser Asn Ile Ile Tyr Val Ala Ser
 275 280 285
 Asn His Phe Val Trp Arg Leu Ile Pro Val Pro Met Ala Thr Gln Ile
 290 295 300
 Gln Gln Leu Leu Gln Asp Lys Gln Phe Glu Leu Ala Leu Gln Leu Ala
 305 310 315 320
 Glu Met Lys Asp Asp Ser Asp Ser Glu Lys Gln Gln Gln Ile His His
 325 330 335
 Ile Lys Asn Leu Tyr Ala Phe Asn Leu Phe Cys Gln Lys Arg Phe Asp
 340 345 350
 Glu Ser Met Gln Val Phe Ala Lys Leu Gly Thr Asp Pro Thr His Val
 355 360 365
 Met Gly Leu Tyr Pro Asp Leu Leu Pro Thr Asp Tyr Arg Lys Gln Leu
 370 375 380
 Gln Tyr Pro Asn Pro Leu Pro Val Leu Ser Gly Ala Glu Leu Glu Lys
 385 390 395 400

Ala	His	Leu	Ala	Leu	Ile	Asp	Tyr	Leu	Thr	Gln	Lys	Arg	Ser	Gln	Leu
				405					410					415	
Val	Lys	Lys	Leu	Asn	Asp	Ser	Asp	His	Gln	Ser	Ser	Thr	Ser	Pro	Leu
			420					425						430	
Met	Glu	Gly	Thr	Pro	Thr	Ile	Lys	Ser	Lys	Lys	Lys	Leu	Leu	Gln	Ile
		435					440							445	
Ile	Asp	Thr	Thr	Leu	Leu	Lys	Cys	Tyr	Leu	His	Thr	Asn	Val	Ala	Leu
	450					455					460				
Val	Ala	Pro	Leu	Leu	Arg	Leu	Glu	Asn	Asn	His	Cys	His	Ile	Glu	Glu
465					470					475					480
Ser	Glu	His	Val	Leu	Lys	Lys	Ala	His	Lys	Tyr	Ser	Glu	Leu	Ile	Ile
			485						490					495	
Leu	Tyr	Glu	Lys	Lys	Gly	Leu	His	Glu	Lys	Ala	Leu	Gln	Val	Leu	Val
			500					505						510	
Asp	Gln	Ser	Lys	Lys	Ala	Asn	Ser	Pro	Leu	Lys	Gly	His	Glu	Arg	Thr
		515					520					525			
Val	Gln	Tyr	Leu	Gln	His	Leu	Gly	Thr	Glu	Asn	Leu	His	Leu	Ile	Phe
	530					535						540			
Ser	Tyr	Ser	Val	Trp	Val	Leu	Arg	Asp	Phe	Pro	Glu	Asp	Gly	Leu	Lys
545					550					555					560
Ile	Phe	Thr	Glu	Asp	Leu	Pro	Glu	Val	Glu	Ser	Leu	Pro	Arg	Asp	Arg
			565						570					575	
Val	Leu	Gly	Phe	Leu	Ile	Glu	Asn	Phe	Lys	Gly	Leu	Ala	Ile	Pro	Tyr
		580						585						590	
Leu	Glu	His	Ile	Ile	His	Val	Trp	Glu	Glu	Thr	Gly	Ser	Arg	Phe	His
	595					600						605			
Asn	Cys	Leu	Ile	Gln	Leu	Tyr	Cys	Glu	Lys	Val	Gln	Gly	Leu	Met	Lys
	610					615					620				
Glu	Tyr	Leu	Leu	Ser	Phe	Pro	Ala	Gly	Lys	Thr	Pro	Val	Pro	Ala	Gly
625					630					635					640
Glu	Glu	Glu	Gly	Glu	Leu	Gly	Glu	Tyr	Arg	Gln	Lys	Leu	Leu	Met	Phe
			645						650					655	
Leu	Glu	Ile	Ser	Ser	Tyr	Tyr	Asp	Pro	Gly	Arg	Leu	Ile	Cys	Asp	Phe
		660					665						670		
Pro	Phe	Asp	Gly	Leu	Leu	Glu	Glu	Arg	Ala	Leu	Leu	Leu	Gly	Arg	Met
	675						680						685		
Gly	Lys	His	Glu	Gln	Ala	Leu	Phe	Ile	Tyr	Val	His	Ile	Leu	Lys	Asp
	690					695					700				
Thr	Arg	Met	Ala	Glu	Glu	Tyr	Cys	His	Lys	His	Tyr	Asp	Arg	Asn	Lys
705					710					715					720
Asp	Gly	Asn	Lys	Asp	Val	Tyr	Leu	Ser	Leu	Leu	Arg	Met	Tyr	Leu	Ser
			725						730					735	
Pro	Pro	Ser	Ile	His	Cys	Leu	Gly	Pro	Ile	Lys	Leu	Glu	Leu	Leu	Glu
		740					745							750	
Pro	Lys	Ala	Asn	Leu	Gln	Ala	Ala	Leu	Gln	Val	Leu	Glu	Leu	His	His
	755					760						765			
Ser	Lys	Leu	Asp	Thr	Thr	Lys	Ala	Leu	Asn	Leu	Leu	Pro	Ala	Asn	Thr
	770					775						780			
Gln	Ile	Asn	Asp	Ile	Arg	Ile	Phe	Leu	Glu	Lys	Val	Leu	Glu	Glu	Asn
785					790					795					800
Ala	Gln	Lys	Lys	Arg	Phe	Asn	Gln	Val	Leu	Lys	Asn	Leu	Leu	His	Ala
			805						810					815	
Glu	Phe	Leu	Arg	Val	Gln	Glu	Glu	Arg	Ile	Leu	His	Gln	Gln	Val	Lys
			820					825					830		
Cys	Ile	Ile	Thr	Glu	Glu	Lys	Val	Cys	Met	Val	Cys	Lys	Lys	Lys	Ile
	835					840						845			
Gly	Asn	Ser	Ala	Phe	Ala	Arg	Tyr	Pro	Asn	Gly	Val	Val	Val	His	Tyr
	850					855				860					
Phe	Cys	Ser	Lys	Glu	Val	Asn	Pro	Ala	Asp	Thr	*				
865					870					875					

<211> 332
 <212> PRT
 <213> Homo sapiens

<400> 1807
 Met Ser Arg Ala Arg Gly Ala Leu Cys Arg Ala Cys Leu Ala Leu Ala
 1 5 10 15
 Ala Ala Leu Ala Ala Leu Leu Leu Leu Pro Leu Pro Leu Pro Arg Ala
 20 25 30
 Pro Ala Pro Ala Arg Thr Pro Ala Pro Ala Pro Arg Ala Pro Pro Ser
 35 40 45
 Arg Pro Ala Ala Pro Ser Leu Arg Pro Asp Asp Val Phe Ile Ala Val
 50 55 60
 Lys Thr Thr Arg Lys Asn His Gly Pro Arg Leu Arg Leu Leu Leu Arg
 65 70 75 80
 Thr Trp Ile Ser Arg Ala Arg Gln Gln Thr Phe Ile Phe Thr Asp Gly
 85 90 95
 Asp Asp Pro Glu Leu Glu Leu Gln Gly Gly Asp Arg Val Ile Asn Thr
 100 105 110
 Asn Cys Ser Ala Val Arg Thr Arg Gln Ala Leu Cys Cys Lys Met Ser
 115 120 125
 Val Glu Tyr Asp Lys Phe Ile Glu Ser Gly Arg Lys Trp Phe Cys His
 130 135 140
 Val Asp Asp Asp Asn Tyr Val Asn Ala Arg Ser Leu Leu His Leu Leu
 145 150 155 160
 Ser Ser Phe Ser Pro Ser Gln Asp Val Tyr Leu Gly Arg Pro Ser Leu
 165 170 175
 Asp His Pro Ile Glu Ala Thr Glu Arg Val Gln Gly Gly Arg Thr Val
 180 185 190
 Thr Thr Val Lys Phe Trp Phe Ala Thr Gly Gly Ala Gly Phe Cys Leu
 195 200 205
 Ser Arg Gly Leu Ala Leu Lys Met Ser Pro Trp Ala Ser Leu Gly Ser
 210 215 220
 Phe Met Ser Thr Ala Glu Gln Val Arg Leu Pro Asp Asp Cys Thr Val
 225 230 235 240
 Gly Tyr Ile Val Glu Gly Leu Leu Gly Ala Arg Leu Leu His Ser Pro
 245 250 255
 Leu Phe His Ser His Leu Glu Asn Leu Gln Arg Leu Pro Pro Asp Thr
 260 265 270
 Leu Leu Gln Gln Val Thr Leu Ser His Gly Gly Pro Glu Asn Pro Gln
 275 280 285
 Asn Val Val Asn Val Ala Gly Gly Phe Ser Leu His Gln Asp Pro Thr
 290 295 300
 Arg Phe Lys Ser Ile His Cys Leu Leu Tyr Pro Asp Thr Asp Trp Cys
 305 310 315 320
 Pro Arg Gln Lys Gln Gly Ala Pro Thr Ser Arg *
 325 330 331

<210> 1808
 <211> 401
 <212> PRT
 <213> Homo sapiens

<400> 1808
 Met Phe Leu Pro Gly Pro Gln Pro Ser Ala Val Leu Pro Gly Arg Trp
 1 5 10 15
 Leu Trp Ala Phe Arg Thr His Ser Gln Val Ser Ser Arg Arg Leu Pro
 20 25 30
 His Thr Arg Val His Lys Thr Lys Leu Glu Phe His Glu Ala Ile Leu
 35 40 45

Arg	Leu	Ser	Val	Gln	Glu	Arg	Cys	Arg	Arg	Ser	Ile	Leu	Phe	Tyr	Pro
50						55					60				
Tyr	Ser	Thr	Arg	Phe	Asp	Ser	Val	Pro	Lys	Lys	Met	Pro	Ile	Ser	Thr
65					70					75					80
His	Leu	Tyr	Phe	His	Glu	Arg	Ser	Cys	Ser	Gln	Gln	Leu	Cys	Arg	Thr
				85					90					95	
Pro	His	Cys	Pro	Pro	Pro	Ser	Pro	Leu	Ala	Val	Pro	Ser	Ser	Ser	Arg
			100					105					110		
Phe	Pro	Gln	Leu	Leu	His	Ser	Arg	Lys	Pro	Glu	Asp	Arg	Phe	Ser	Ser
		115					120					125			
Leu	Lys	Gly	Val	Pro	Thr	Glu	Val	Lys	Ile	Gln	Glu	Met	Thr	Lys	Leu
	130					135					140				
Gly	His	Glu	Leu	Met	Leu	Cys	Ala	Pro	Asp	Asp	Gln	Glu	Leu	Leu	Lys
145					150					155					160
Gly	Cys	Ala	Cys	Ala	Gln	Lys	Gln	Leu	His	Phe	Met	Asp	Gln	Leu	Leu
				165					170					175	
Asp	Thr	Ile	Arg	Ser	Leu	Thr	Ile	Gly	Cys	Ser	Ser	Cys	Ser	Ser	Leu
			180					185					190		
Met	Glu	His	Phe	Glu	Asp	Thr	Arg	Glu	Lys	Asn	Glu	Ala	Leu	Leu	Gly
		195					200					205			
Glu	Leu	Phe	Ser	Ser	Pro	His	Leu	Gln	Met	Leu	Leu	Asn	Pro	Glu	Cys
	210					215						220			
Asp	Pro	Trp	Pro	Leu	Asp	Met	Gln	Pro	Leu	Leu	Asn	Lys	Gln	Ser	Asp
225					230					235					240
Asp	Trp	Gln	Trp	Ala	Ser	Ala	Ser	Ala	Lys	Ser	Glu	Glu	Glu	Glu	Lys
				245					250					255	
Leu	Ala	Glu	Leu	Ala	Arg	Gln	Leu	Gln	Glu	Ser	Ala	Ala	Lys	Leu	His
			260					265					270		
Ala	Leu	Arg	Thr	Glu	Tyr	Phe	Ala	Gln	His	Glu	Gln	Gly	Ala	Ala	Ala
		275					280					285			
Gly	Ala	Ala	Asp	Ile	Ser	Thr	Leu	Asp	Gln	Lys	Leu	Arg	Leu	Val	Thr
	290					295					300				
Ser	Asp	Phe	His	Gln	Leu	Ile	Leu	Ala	Phe	Leu	Gln	Val	Tyr	Asp	Asp
305					310					315					320
Glu	Leu	Gly	Glu	Cys	Cys	Gln	Arg	Pro	Gly	Pro	Asp	Leu	His	Pro	Cys
				325					330					335	
Gly	Pro	Ile	Ile	Gln	Ala	Thr	His	Gln	Asn	Leu	Thr	Ser	Tyr	Ser	Gln
			340					345					350		
Leu	Leu	Gln	Val	Val	Met	Ala	Val	Ala	Asp	Thr	Ser	Ala	Lys	Ala	Val
		355					360					365			
Glu	Thr	Val	Lys	Lys	Gln	Gln	Gly	Glu	Gln	Ile	Cys	Trp	Gly	Gly	Ser
	370					375					380				
Ser	Ser	Val	Met	Ser	Leu	Ala	Thr	Lys	Met	Asn	Glu	Leu	Met	Glu	Lys
385					390					395					400

*

<210> 1809
 <211> 250
 <212> PRT
 <213> Homo sapiens

<400> 1809

Met	Leu	Leu	Lys	Val	Gln	Tyr	Ile	Ser	Cys	Trp	Ala	Val	Met	Ser	Phe
1				5					10					15	
Ser	Ser	Phe	Val	Leu	Asn	Pro	Leu	Arg	Leu	Ser	Tyr	Asn	Leu	Val	Cys
			20					25					30		
Lys	Ala	Phe	Ser	Gly	Met	Val	Phe	Pro	Pro	Pro	Val	Phe	Val	Val	Thr
		35					40					45			
Glu	Pro	Ala	Asp	Thr	Asp	Gly	Gln	Leu	Tyr	Leu	Cys	Phe	Ser	Phe	Asp
	50					55					60				


```

Pro Tyr Ile Ala Val Ser Glu Leu Gln Lys Leu Ile Arg Gln Leu Leu
 65          70          75          80
Leu Leu Gln Leu Phe Pro Lys Tyr Leu Ile Tyr Ile Asp Ile Asn Lys
          85          90          95
Ala Leu Leu Ala Lys Arg Lys Arg Leu Glu Met Tyr Thr Lys Ala Ser
          100          105          110
Leu Lys Thr Ser Asn Gln Lys Ile Glu His Val Trp Lys Thr Gln Gln
          115          120          125
Asp Gln Arg Gln Lys Leu Asn Gln Glu Tyr Ser Gln Gln Phe Leu Thr
          130          135          140
Leu Phe Gln Gln Trp Asp Leu Asp Met Gln Lys Ala Glu Glu Gln Glu
145          150          155          160
Glu Lys Ile Leu Asn Met Phe Arg Gln Gln Gln Lys Ile Leu Gln Gln
          165          170          175
Ser Arg Ile Val Gln Ser Gln Arg Leu Lys Thr Ile Lys Gln Leu Tyr
          180          185          190
Glu Gln Phe Ile Lys Ser Met Glu Glu Leu Glu Lys Asn His Asp Asn
          195          200          205
Leu Leu Thr Gly Ala Gln Asn Glu Phe Lys Lys Glu Met Ala Met Leu
          210          215          220
Gln Lys Lys Ile Met Met Glu Thr Gln Gln Gln Glu Ile Ala Ser Val
225          230          235          240
Arg Lys Ser Leu Gln Ser Met Leu Phe *
          245          249

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<210> 1810
<211> 116
<212> PRT
<213> Homo sapiens

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<400> 1810
Met Trp Val Asn Pro Glu Glu Val Leu Leu Ala Asn Ala Leu Trp Ile
 1          5          10          15
Thr Glu Arg Ala Asn Pro Tyr Phe Ile Leu Gln Arg Arg Lys Gly His
          20          25          30
Ala Gly Asp Gly Gly Gly Gly Gly Gly Leu Ala Gly Leu Leu Val Gly
          35          40          45
Thr Leu Asp Val Val Leu Asp Ser Ser Ala Arg Val Ala Pro Tyr Arg
          50          55          60
Ile Leu Tyr Gln Thr Pro Asp Ser Leu Gly Leu Leu Asp His Arg Leu
          65          70          75          80
Trp Val Val Pro Gly Lys Lys Ser Leu Asn Thr Gly Asn Gly Leu Ser
          85          90          95
Lys Ile Ser Cys Arg His Phe Pro Ser Leu Lys Met Arg Met Ile Ser
          100          105          110
Pro His Leu *
          115

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<210> 1811
<211> 644
<212> PRT
<213> Homo sapiens

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<400> 1811
Met Val Asp Ala Gly Gly Val Glu Asn Ile Thr Gln Leu Pro Gln Glu
 1          5          10          15
Leu Pro Gln Met Met Ala Ala Ala Ala Asp Gly Leu Gly Ser Ile Ala
          20          25          30

```


Ile	Asp	Thr	Thr	Gln	Leu	Asn	Met	Ser	Val	Thr	Asp	Pro	Thr	Ala	Trp
	35						40					45			
Ala	Thr	Ala	Met	Asn	Asn	Leu	Gly	Met	Val	Pro	Val	Gly	Leu	Pro	Gly
	50					55					60				
Gln	Gln	Leu	Val	Ser	Asp	Ser	Ile	Cys	Val	Pro	Gly	Phe	Asp	Pro	Ser
	65				70					75					80
Leu	Asn	Met	Met	Thr	Gly	Ile	Thr	Pro	Ile	Asn	Pro	Met	Ile	Pro	Gly
				85					90					95	
Leu	Gly	Leu	Val	Pro	Pro	Pro	Pro	Pro	Thr	Glu	Val	Ala	Val	Val	Lys
			100					105					110		
Glu	Ile	Ile	His	Cys	Lys	Ser	Cys	Thr	Leu	Phe	Pro	Gln	Asn	Pro	Asn
	115						120					125			
Leu	Pro	Pro	Pro	Ser	Thr	Arg	Glu	Arg	Pro	Pro	Gly	Cys	Lys	Thr	Val
	130					135					140				
Phe	Val	Gly	Gly	Leu	Pro	Glu	Asn	Ala	Thr	Glu	Glu	Ile	Ile	Gln	Glu
	145				150					155					160
Val	Phe	Glu	Gln	Cys	Gly	Asp	Ile	Thr	Ala	Ile	Arg	Lys	Ser	Lys	Lys
				165					170					175	
Asn	Phe	Cys	His	Ile	Arg	Phe	Ala	Glu	Glu	Phe	Met	Val	Asp	Lys	Ala
			180					185					190		
Ile	Tyr	Leu	Ser	Gly	Tyr	Arg	Met	Arg	Leu	Gly	Ser	Ser	Thr	Asp	Lys
	195						200					205			
Lys	Asp	Ser	Gly	Arg	Leu	His	Val	Asp	Phe	Ala	Gln	Ala	Arg	Asp	Asp
	210					215					220				
Phe	Tyr	Glu	Trp	Glu	Cys	Lys	Gln	Arg	Met	Arg	Ala	Arg	Glu	Glu	Arg
	225				230					235					240
His	Arg	Arg	Lys	Leu	Glu	Glu	Asp	Arg	Leu	Arg	Pro	Pro	Ser	Pro	Pro
				245					250					255	
Ala	Ile	Met	His	Tyr	Ser	Glu	His	Glu	Ala	Ala	Leu	Leu	Ala	Glu	Lys
			260					265					270		
Leu	Lys	Asp	Asp	Ser	Lys	Phe	Ser	Glu	Ala	Ile	Thr	Val	Leu	Leu	Ser
	275						280					285			
Trp	Ile	Glu	Arg	Gly	Glu	Val	Asn	Arg	Arg	Ser	Ala	Asn	Gln	Phe	Tyr
	290					295					300				
Ser	Met	Val	Gln	Ser	Ala	Asn	Ser	His	Val	Arg	Arg	Leu	Met	Asn	Glu
	305				310					315					320
Lys	Ala	Thr	His	Glu	Gln	Glu	Met	Glu	Glu	Ala	Lys	Glu	Asn	Phe	Lys
				325					330					335	
Asn	Ala	Leu	Thr	Gly	Ile	Leu	Thr	Gln	Phe	Glu	Gln	Ile	Val	Ala	Val
			340					345					350		
Phe	Asn	Ala	Ser	Thr	Arg	Gln	Lys	Ala	Trp	Asp	His	Phe	Ser	Lys	Ala
	355						360					365			
Gln	Arg	Lys	Asn	Ile	Asp	Ile	Trp	Arg	Lys	His	Ser	Glu	Glu	Leu	Arg
	370					375				380					
Asn	Ala	Gln	Ser	Glu	Gln	Leu	Met	Gly	Ile	Arg	Arg	Glu	Glu	Glu	Met
	385				390					395					400
Glu	Met	Ser	Asp	Asp	Glu	Asn	Cys	Asp	Ser	Pro	Thr	Lys	Lys	Met	Arg
			405						410					415	
Val	Asp	Glu	Ser	Ala	Leu	Ala	Ala	Gln	Ala	Tyr	Ala	Leu	Lys	Glu	Glu
			420					425					430		
Asn	Asp	Ser	Leu	Arg	Trp	Gln	Leu	Asp	Ala	Tyr	Arg	Asn	Glu	Val	Glu
	435					440						445			
Leu	Leu	Lys	Gln	Glu	Lys	Glu	Gln	Leu	Phe	Arg	Thr	Glu	Glu	Asn	Leu
	450					455					460				
Thr	Lys	Asp	Gln	Gln	Leu	Gln	Phe	Leu	Gln	Gln	Thr	Met	Gln	Gly	Met
	465				470					475					480
Gln	Gln	Gln	Leu	Leu	Thr	Ile	Gln	Glu	Glu	Leu	Asn	Asn	Lys	Lys	Ser
				485					490					495	
Glu	Leu	Glu	Gln	Ala	Lys	Glu	Glu	Gln	Ser	His	Thr	Gln	Ala	Leu	Leu
			500					505					510		
Lys	Val	Leu	Gln	Glu	Gln	Leu	Lys	Gly	Thr	Lys	Glu	Leu	Val	Glu	Thr
	515						520					525			
Asn	Gly	His	Ser	His	Glu	Asp	Ser	Asn	Glu	Ile	Asn	Val	Leu	Thr	Val
	530					535					540				

Ala	Leu	Val	Asn	Gln	Asp	Arg	Glu	Asn	Asn	Ile	Glu	Lys	Arg	Ser	Gln
545					550					555					560
Gly	Leu	Lys	Ser	Glu	Lys	Glu	Ala	Leu	Leu	Ile	Gly	Ile	Ile	Ser	Thr
				565						570					575
Phe	Leu	His	Val	His	Pro	Phe	Gly	Ala	Asn	Ile	Glu	Tyr	Leu	Trp	Ser
			580					585						590	
Tyr	Met	Gln	Gln	Leu	Asp	Ser	Lys	Ile	Ser	Ala	Asn	Glu	Ile	Glu	Met
		595					600					605			
Leu	Leu	Met	Arg	Leu	Pro	Arg	Met	Phe	Lys	Gln	Glu	Phe	Thr	Gly	Val
	610					615					620				
Gly	Ala	Thr	Leu	Glu	Lys	Arg	Trp	Lys	Leu	Cys	Ala	Phe	Glu	Gly	Ile
625					630					635					640
Lys	Thr	Thr	*												
		643													

<210> 1812

<211> 855

<212> PRT

<213> Homo sapiens

<400> 1812

Met	Pro	Gly	Gly	Gly	Pro	Gln	Gly	Ala	Pro	Ala	Ala	Ala	Gly	Gly	Gly
1				5					10					15	
Gly	Val	Ser	His	Arg	Ala	Gly	Ser	Arg	Asp	Cys	Leu	Pro	Pro	Ala	Ala
			20					25					30		
Cys	Phe	Arg	Arg	Arg	Arg	Leu	Ala	Arg	Arg	Pro	Gly	Tyr	Met	Arg	Ser
		35					40					45			
Ser	Thr	Gly	Pro	Gly	Ile	Gly	Phe	Leu	Ser	Pro	Ala	Val	Gly	Thr	Leu
	50					55					60				
Phe	Arg	Phe	Pro	Gly	Gly	Val	Ser	Gly	Glu	Glu	Ser	His	His	Ser	Glu
65					70					75					80
Ser	Arg	Ala	Arg	Gln	Cys	Gly	Leu	Asp	Ser	Arg	Gly	Leu	Leu	Val	Arg
				85					90					95	
Ser	Pro	Val	Ser	Lys	Ser	Ala	Ala	Ala	Pro	Thr	Val	Thr	Ser	Val	Arg
		100					105						110		
Gly	Thr	Ser	Ala	His	Phe	Gly	Ile	Gln	Leu	Arg	Gly	Gly	Thr	Arg	Leu
	115					120						125			
Pro	Asp	Arg	Leu	Ser	Trp	Pro	Cys	Gly	Pro	Gly	Ser	Ala	Gly	Trp	Gln
	130					135					140				
Gln	Glu	Phe	Ala	Ala	Met	Asp	Ser	Ser	Glu	Thr	Leu	Asp	Ala	Ser	Trp
145					150					155					160
Glu	Ala	Ala	Cys	Ser	Asp	Gly	Ala	Arg	Arg	Val	Arg	Ala	Ala	Gly	Ser
				165					170					175	
Leu	Pro	Ser	Ala	Glu	Leu	Ser	Ser	Asn	Ser	Cys	Ser	Pro	Gly	Cys	Gly
		180						185					190		
Pro	Glu	Val	Pro	Pro	Thr	Pro	Pro	Gly	Ser	His	Ser	Ala	Phe	Thr	Ser
	195						200					205			
Ser	Phe	Ser	Phe	Ile	Arg	Leu	Ser	Leu	Gly	Ser	Ala	Gly	Glu	Arg	Gly
	210					215					220				
Glu	Ala	Glu	Gly	Cys	Pro	Pro	Ser	Arg	Glu	Ala	Glu	Ser	His	Cys	Gln
225					230					235					240
Ser	Pro	Gln	Glu	Met	Gly	Ala	Lys	Ala	Ala	Ser	Leu	Asp	Gly	Pro	His
				245					250					255	
Glu	Asp	Pro	Arg	Cys	Leu	Ser	Gln	Pro	Phe	Ser	Leu	Leu	Ala	Thr	Arg
		260						265					270		
Val	Ser	Ala	Asp	Leu	Ala	Gln	Ala	Ala	Arg	Asn	Ser	Ser	Arg	Pro	Glu
		275					280						285		
Arg	Asp	Met	His	Ser	Leu	Pro	Asp	Met	Asp	Pro	Gly	Ser	Ser	Ser	Ser
	290					295					300				
Leu	Asp	Pro	Ser	Leu	Ala	Gly	Cys	Gly	Gly	Asp	Gly	Ser	Ser	Gly	Ser
305					310					315					320

Gly	Asp	Ala	His	Ser	Trp	Asp	Thr	Leu	Leu	Arg	Lys	Trp	Glu	Pro	Val		
				325					330					335			
Leu	Arg	Asp	Cys	Leu	Leu	Arg	Asn	Arg	Arg	Gln	Met	Glu	Val	Ile	Ser		
			340					345					350				
Leu	Arg	Leu	Lys	Leu	Gln	Lys	Leu	Gln	Glu	Asp	Ala	Val	Glu	Asn	Asp		
		355					360					365					
Asp	Tyr	Asp	Lys	Ala	Glu	Thr	Leu	Gln	Gln	Arg	Leu	Glu	Asp	Leu	Glu		
	370					375					380						
Gln	Glu	Lys	Ile	Ser	Leu	His	Phe	Gln	Leu	Pro	Ser	Arg	Gln	Pro	Ala		
385					390					395					400		
Leu	Ser	Ser	Phe	Leu	Gly	His	Leu	Ala	Ala	Gln	Val	Gln	Ala	Ala	Leu		
			405					410						415			
Arg	Arg	Gly	Ala	Thr	Gln	Gln	Ala	Ser	Gly	Asp	Asp	Thr	His	Thr	Pro		
			420					425					430				
Leu	Arg	Met	Glu	Pro	Arg	Leu	Leu	Glu	Pro	Thr	Ala	Gln	Asp	Ser	Leu		
		435					440					445					
His	Val	Ser	Ile	Thr	Arg	Arg	Asp	Trp	Leu	Leu	Gln	Glu	Lys	Gln	Gln		
	450					455					460						
Leu	Gln	Lys	Glu	Ile	Glu	Ala	Leu	Gln	Ala	Arg	Met	Phe	Val	Leu	Glu		
465					470					475					480		
Ala	Lys	Asp	Gln	Gln	Leu	Arg	Arg	Glu	Ile	Glu	Glu	Gln	Glu	Gln	Gln		
			485					490						495			
Leu	Gln	Trp	Gln	Gly	Cys	Asp	Leu	Thr	Pro	Leu	Val	Gly	Gln	Leu	Ser		
		500						505					510				
Leu	Gly	Gln	Leu	Gln	Glu	Val	Ser	Lys	Ala	Leu	Gln	Asp	Thr	Leu	Ala		
	515						520					525					
Ser	Ala	Gly	Gln	Ile	Pro	Phe	His	Ala	Glu	Pro	Pro	Glu	Thr	Ile	Arg		
	530					535					540						
Ser	Leu	Gln	Glu	Arg	Ile	Lys	Ser	Leu	Asn	Leu	Ser	Leu	Lys	Glu	Ile		
545					550					555					560		
Thr	Thr	Lys	Val	Cys	Met	Ser	Glu	Lys	Phe	Cys	Ser	Thr	Leu	Arg	Lys		
			565					570						575			
Lys	Val	Asn	Asp	Ile	Glu	Thr	Gln	Leu	Pro	Ala	Leu	Leu	Glu	Ala	Lys		
		580						585					590				
Met	His	Ala	Ile	Ser	Gly	Asn	His	Phe	Trp	Thr	Ala	Lys	Asp	Leu	Thr		
	595					600						605					
Glu	Glu	Ile	Arg	Ser	Leu	Thr	Ser	Glu	Arg	Glu	Gly	Leu	Glu	Gly	Leu		
	610					615				620							
Leu	Ser	Lys	Leu	Leu	Val	Leu	Ser	Ser	Arg	Asn	Val	Lys	Lys	Leu	Gly		
625					630					635					640		
Ser	Val	Lys	Glu	Asp	Tyr	Asn	Arg	Leu	Arg	Arg	Glu	Val	Glu	His	Gln		
			645					650						655			
Glu	Thr	Ala	Tyr	Glu	Thr	Ser	Val	Lys	Glu	Asn	Thr	Met	Lys	Tyr	Met		
	660							665					670				
Glu	Thr	Leu	Lys	Asn	Lys	Leu	Cys	Ser	Cys	Lys	Cys	Pro	Leu	Leu	Gly		
	675						680					685					
Lys	Val	Trp	Glu	Ala	Asp	Leu	Glu	Ala	Cys	Arg	Leu	Leu	Ile	Gln	Cys		
	690					695						700					
Leu	Gln	Leu	Gln	Glu	Ala	Arg	Gly	Ser	Leu	Ser	Val	Glu	Asp	Glu	Arg		
705					710					715					720		
Gln	Met	Asp	Asp	Leu	Glu	Gly	Ala	Ala	Pro	Pro	Ile	Pro	Pro	Arg	Leu		
			725					730						735			
His	Ser	Glu	Asp	Lys	Arg	Lys	Thr	Pro	Leu	Lys	Val	Leu	Glu	Glu	Trp		
		740						745					750				
Lys	Thr	His	Leu	Ile	Pro	Ser	Leu	His	Cys	Ala	Gly	Gly	Glu	Gln	Lys		
	755						760					765					
Glu	Glu	Ser	Tyr	Ile	Leu	Ser	Ala	Glu	Leu	Gly	Glu	Lys	Cys	Glu	Asp		
	770					775					780						
Ile	Gly	Lys	Lys	Leu	Leu	Tyr	Leu	Glu	Asp	Gln	Leu	His	Thr	Ala	Ile		
785					790					795					800		
His	Ser	His	Asp	Glu	Asp	Leu	Ile	Gln	Ser	Leu	Arg	Arg	Glu	Leu	Gln		
			805					810						815			
Met	Val	Lys	Glu	Thr	Leu	Gln	Ala	Met	Ile	Leu	Gln	Leu	Gln	Pro	Ala		
			820					825					830				

Lys Glu Ala Gly Glu Arg Glu Ala Ala Ala Ser Cys Met Thr Ala Gly
 835 840 845
 Val His Glu Ala Gln Ala *
 850 854

<210> 1813
 <211> 318
 <212> PRT
 <213> Homo sapiens

<400> 1813
 Met Tyr Asn Met Met Glu Thr Glu Leu Lys Pro Pro Gly Pro Gln Gln
 1 5 10 15
 Thr Ser Gly Gly Gly Gly Gly Asn Ser Thr Ala Ala Ala Ala Gly Gly
 20 25 30
 Asn Gln Lys Asn Ser Pro Asp Arg Val Lys Arg Pro Met Asn Ala Phe
 35 40 45
 Met Val Trp Ser Arg Gly Gln Arg Arg Lys Met Ala Gln Glu Asn Pro
 50 55 60
 Lys Met His Asn Ser Glu Ile Ser Lys Arg Leu Gly Ala Glu Trp Lys
 65 70 75 80
 Leu Leu Ser Glu Thr Glu Lys Arg Pro Phe Ile Asp Glu Ala Lys Arg
 85 90 95
 Leu Arg Ala Leu His Met Lys Glu His Pro Asp Tyr Lys Tyr Arg Pro
 100 105 110
 Arg Arg Lys Thr Lys Thr Leu Met Lys Lys Asp Lys Tyr Thr Leu Pro
 115 120 125
 Gly Gly Leu Leu Ala Pro Gly Gly Asn Ser Met Ala Ser Gly Val Gly
 130 135 140
 Val Gly Ala Gly Leu Gly Ala Gly Val Asn Gln Arg Met Asp Ser Tyr
 145 150 155 160
 Ala His Met Asn Gly Trp Ser Asn Gly Ser Tyr Ser Met Met Gln Asp
 165 170 175
 Gln Leu Gly Tyr Pro Gln His Pro Gly Leu Asn Ala His Gly Ala Ala
 180 185 190
 Gln Met Gln Pro Met His Arg Tyr Asp Val Ser Ala Leu Gln Tyr Asn
 195 200 205
 Ser Met Thr Ser Ser Gln Thr Tyr Met Asn Gly Ser Pro Thr Tyr Ser
 210 215 220
 Met Ser Tyr Ser Gln Gln Gly Thr Pro Gly Met Ala Leu Gly Ser Met
 225 230 235 240
 Gly Ser Val Val Lys Ser Glu Ala Ser Ser Ser Pro Pro Val Val Thr
 245 250 255
 Ser Ser Ser His Ser Arg Ala Pro Cys Gln Ala Gly Asp Leu Arg Asp
 260 265 270
 Met Ile Ser Met Tyr Leu Pro Gly Ala Glu Val Pro Glu Pro Ala Ala
 275 280 285
 Pro Ser Arg Leu His Met Ser Gln His Tyr Gln Ser Gly Pro Val Pro
 290 295 300
 Gly Thr Ala Ile Asn Gly Thr Leu Pro Leu Ser His Met *
 305 310 315 317

<210> 1814
 <211> 920
 <212> PRT
 <213> Homo sapiens

<400> 1814

Met	Val	Gln	Arg	Met	Trp	Ala	Glu	Ala	Ala	Gly	Pro	Ala	Gly	Gly	Ala
1				5					10					15	
Glu	Pro	Leu	Phe	Pro	Gly	Ser	Arg	Arg	Ser	Arg	Ser	Val	Trp	Asp	Ala
			20					25					30		
Val	Arg	Leu	Glu	Val	Gly	Val	Pro	Asp	Ser	Cys	Pro	Val	Val	Leu	His
		35					40					45			
Ser	Phe	Thr	Gln	Leu	Asp	Pro	Asp	Leu	Pro	Arg	Pro	Glu	Ser	Ser	Thr
	50				55					60					
Gln	Glu	Ile	Gly	Glu	Glu	Leu	Ile	Asn	Gly	Val	Ile	Tyr	Ser	Ile	Ser
	65				70					75				80	
Leu	Arg	Lys	Val	Gln	Leu	His	His	Gly	Gly	Asn	Lys	Gly	Gln	Arg	Trp
			85					90					95		
Leu	Gly	Tyr	Glu	Asn	Glu	Ser	Ala	Leu	Asn	Leu	Tyr	Glu	Thr	Cys	Lys
			100					105					110		
Val	Arg	Thr	Val	Lys	Ala	Gly	Thr	Leu	Glu	Lys	Leu	Val	Glu	His	Leu
	115						120					125			
Val	Pro	Ala	Phe	Gln	Gly	Ser	Asp	Leu	Ser	Tyr	Val	Thr	Ile	Phe	Leu
	130				135						140				
Cys	Thr	Tyr	Arg	Ala	Phe	Thr	Thr	Thr	Gln	Gln	Val	Leu	Asp	Leu	Leu
	145				150					155				160	
Phe	Lys	Arg	Tyr	Gly	Arg	Cys	Asp	Ala	Leu	Thr	Ala	Ser	Ser	Arg	Tyr
			165					170					175		
Gly	Cys	Ile	Leu	Pro	Tyr	Ser	Asp	Glu	Asp	Gly	Gly	Pro	Gln	Asp	Gln
		180					185						190		
Leu	Lys	Asn	Ala	Ile	Ser	Ser	Ile	Leu	Gly	Thr	Trp	Leu	Asp	Gln	Tyr
	195						200					205			
Ser	Glu	Asp	Phe	Cys	Gln	Pro	Pro	Asp	Phe	Pro	Cys	Leu	Lys	Gln	Leu
	210				215						220				
Val	Ala	Tyr	Val	Gln	Leu	Asn	Met	Pro	Gly	Ser	Asp	Leu	Glu	Arg	Arg
	225				230					235				240	
Ala	His	Leu	Leu	Leu	Ala	Gln	Leu	Glu	His	Ser	Glu	Pro	Ile	Glu	Ala
			245					250					255		
Glu	Pro	Glu	Gly	Glu	Glu	Asp	Trp	Ala	Leu	Ser	Pro	Val	Pro	Ala	Leu
		260						265					270		
Lys	Pro	Thr	Pro	Glu	Leu	Glu	Leu	Ala	Leu	Thr	Pro	Ala	Arg	Ala	Pro
	275						280					285			
Ser	Pro	Val	Pro	Ala	Pro	Ala	Pro	Glu	Pro	Glu	Pro	Ala	Pro	Thr	Pro
	290				295						300				
Ala	Pro	Gly	Ser	Glu	Leu	Glu	Val	Ala	Pro	Ala	Pro	Ala	Pro	Glu	Leu
	305				310				315					320	
Gln	Gln	Ala	Pro	Glu	Pro	Ala	Val	Gly	Leu	Glu	Ser	Ala	Pro	Ala	Pro
			325					330					335		
Ala	Leu	Glu	Leu	Glu	Pro	Ala	Pro	Glu	Gln	Asp	Pro	Ala	Pro	Ser	Gln
		340						345					350		
Thr	Leu	Glu	Leu	Glu	Pro	Ala	Pro	Ala	Pro	Val	Pro	Ser	Leu	Gln	Pro
	355						360					365			
Ser	Trp	Pro	Ser	Pro	Val	Val	Ala	Glu	Asn	Gly	Leu	Ser	Glu	Glu	Lys
	370				375						380				
Pro	His	Leu	Leu	Val	Phe	Pro	Pro	Asp	Leu	Val	Ala	Glu	Gln	Phe	Thr
	385				390					395				400	
Leu	Met	Asp	Ala	Glu	Leu	Phe	Lys	Lys	Val	Val	Pro	Tyr	His	Cys	Leu
			405					410					415		
Gly	Ser	Ile	Trp	Ser	Gln	Arg	Asp	Lys	Lys	Gly	Lys	Glu	His	Leu	Ala
		420					425						430		
Pro	Thr	Ile	Arg	Ala	Thr	Val	Thr	Gln	Phe	Asn	Ser	Val	Ala	Asn	Cys
	435						440					445			
Val	Ile	Thr	Thr	Cys	Leu	Gly	Asn	Arg	Ser	Thr	Lys	Ala	Pro	Asp	Arg
	450					455					460				
Ala	Arg	Val	Val	Glu	His	Trp	Ile	Glu	Val	Ala	Arg	Glu	Cys	Arg	Ile
	465				470					475				480	
Leu	Lys	Asn	Phe	Ser	Ser	Leu	Tyr	Ala	Ile	Leu	Ser	Ala	Leu	Gln	Ser
			485					490					495		
Asn	Ser	Ile	His	Arg	Leu	Lys	Lys	Thr	Trp	Glu	Asp	Val	Ser	Arg	Asp
		500						505					510		

Ser	Phe	Arg	Ile	Phe	Gln	Lys	Leu	Ser	Glu	Ile	Phe	Ser	Asp	Glu	Asn
	515						520					525			
Asn	Tyr	Ser	Leu	Ser	Arg	Glu	Leu	Leu	Ile	Lys	Glu	Gly	Thr	Ser	Lys
	530					535					540				
Phe	Ala	Thr	Leu	Glu	Met	Asn	Pro	Lys	Arg	Ala	Gln	Lys	Arg	Pro	Lys
545					550					555					560
Glu	Thr	Gly	Ile	Ile	Gln	Gly	Thr	Val	Pro	Tyr	Leu	Gly	Thr	Phe	Leu
			565					570						575	
Thr	Asp	Leu	Val	Met	Leu	Asp	Thr	Ala	Met	Lys	Asp	Tyr	Leu	Tyr	Gly
		580						585					590		
Arg	Leu	Ile	Asn	Phe	Glu	Lys	Arg	Arg	Lys	Glu	Phe	Glu	Val	Ile	Ala
	595						600					605			
Gln	Ile	Lys	Leu	Leu	Gln	Ser	Ala	Cys	Asn	Asn	Tyr	Ser	Ile	Ala	Pro
	610					615					620				
Asp	Glu	Gln	Phe	Gly	Ala	Trp	Phe	Arg	Ala	Val	Glu	Arg	Leu	Ser	Glu
625					630					635					640
Thr	Glu	Ser	Tyr	Asn	Leu	Ser	Cys	Glu	Leu	Glu	Pro	Pro	Ser	Glu	Ser
				645				650						655	
Ala	Ser	Asn	Thr	Leu	Arg	Thr	Lys	Lys	Asn	Thr	Ala	Ile	Val	Lys	Arg
		660						665					670		
Trp	Ser	Asp	Arg	Gln	Ala	Pro	Ser	Thr	Glu	Leu	Ser	Thr	Ser	Gly	Ser
	675						680					685			
Ser	His	Ser	Lys	Ser	Cys	Asp	Gln	Leu	Arg	Cys	Gly	Pro	Tyr	Leu	Ser
	690					695					700				
Ser	Gly	Asp	Ile	Ala	Asp	Ala	Leu	Ser	Val	His	Ser	Ala	Gly	Ser	Ser
705					710					715					720
Ser	Ser	Asp	Val	Glu	Glu	Ile	Asn	Ile	Ser	Phe	Val	Pro	Glu	Ser	Pro
			725						730					735	
Asp	Gly	Gln	Glu	Lys	Lys	Phe	Trp	Glu	Ser	Ala	Ser	Gln	Ser	Ser	Pro
		740						745					750		
Glu	Thr	Ser	Gly	Ile	Ser	Ser	Ala	Ser	Ser	Ser	Thr	Ser	Ser	Ser	Ser
	755						760					765			
Ala	Ser	Thr	Thr	Pro	Val	Ala	Ala	Thr	Arg	Thr	His	Lys	Arg	Ser	Val
	770					775					780				
Ser	Gly	Leu	Cys	Asn	Ser	Ser	Ser	Ala	Leu	Pro	Leu	Tyr	Asn	Gln	Gln
785				790						795					800
Val	Gly	Asp	Cys	Cys	Ile	Ile	Arg	Val	Ser	Leu	Asp	Val	Asp	Asn	Gly
			805						810					815	
Asn	Met	Tyr	Lys	Ser	Ile	Leu	Val	Thr	Ser	Gln	Asp	Lys	Ala	Pro	Ala
			820					825					830		
Val	Ile	Arg	Lys	Ala	Met	Asp	Lys	His	Asn	Leu	Glu	Glu	Glu	Glu	Pro
	835						840					845			
Glu	Asp	Tyr	Glu	Leu	Leu	Gln	Ile	Leu	Ser	Asp	Asp	Arg	Lys	Leu	Lys
	850					855					860				
Ile	Pro	Glu	Asn	Ala	Asn	Val	Phe	Tyr	Ala	Met	Asn	Ser	Thr	Ala	Asn
865					870					875					880
Tyr	Asp	Phe	Val	Leu	Lys	Lys	Arg	Thr	Phe	Thr	Lys	Gly	Val	Lys	Val
			885						890					895	
Lys	His	Gly	Ala	Ser	Ser	Thr	Leu	Pro	Arg	Met	Lys	Gln	Lys	Gly	Leu
		900						905					910		
Lys	Ile	Ala	Lys	Gly	Ile	Phe	*								
	915					919									

<210> 1815

<211> 1304

<212> PRT

<213> Homo sapiens

<400> 1815

Met	Gly	Asp	Pro	Ala	Pro	Ala	Arg	Ser	Leu	Asp	Asp	Ile	Asp	Leu	Ser
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Ala	Leu	Arg	Asp	Pro	Ala	Gly	Ile	Phe	Glu	Leu	Val	Glu	Val	Val	Gly
			20					25					30		
Asn	Gly	Thr	Tyr	Gly	Gln	Val	Tyr	Lys	Gly	Arg	His	Val	Lys	Thr	Gly
		35					40					45			
Gln	Leu	Ala	Ala	Ile	Lys	Val	Met	Asp	Val	Thr	Glu	Asp	Glu	Glu	Glu
	50					55					60				
Glu	Ile	Lys	Gln	Glu	Ile	Asn	Met	Leu	Lys	Lys	Tyr	Ser	His	His	Arg
65					70					75					80
Asn	Ile	Ala	Thr	Tyr	Tyr	Gly	Ala	Phe	Ile	Lys	Lys	Ser	Pro	Pro	Gly
			85						90					95	
Asn	Asp	Asp	Gln	Leu	Trp	Leu	Val	Met	Glu	Phe	Cys	Gly	Ala	Gly	Ser
			100					105					110		
Val	Thr	Asp	Leu	Val	Lys	Asn	Thr	Lys	Gly	Asn	Ala	Leu	Lys	Glu	Asp
		115				120						125			
Cys	Ile	Ala	Tyr	Ile	Cys	Arg	Glu	Ile	Leu	Arg	Gly	Leu	Ala	His	Leu
	130					135					140				
His	Ala	His	Lys	Val	Ile	His	Arg	Asp	Ile	Lys	Gly	Gln	Asn	Val	Leu
145					150					155					160
Leu	Thr	Glu	Asn	Ala	Glu	Val	Lys	Leu	Val	Asp	Phe	Gly	Val	Ser	Ala
				165					170					175	
Gln	Leu	Asp	Arg	Thr	Val	Gly	Arg	Arg	Asn	Thr	Phe	Ile	Gly	Thr	Pro
			180					185					190		
Tyr	Trp	Met	Ala	Pro	Glu	Val	Ile	Ala	Cys	Asp	Glu	Asn	Pro	Asp	Ala
		195					200					205			
Thr	Tyr	Asp	Tyr	Arg	Ser	Asp	Ile	Trp	Ser	Leu	Gly	Ile	Thr	Ala	Ile
	210					215					220				
Glu	Met	Ala	Glu	Gly	Ala	Pro	Pro	Leu	Cys	Asp	Met	His	Pro	Met	Arg
225					230					235					240
Ala	Leu	Phe	Leu	Ile	Pro	Arg	Asn	Pro	Pro	Pro	Arg	Leu	Lys	Ser	Lys
				245					250					255	
Lys	Trp	Ser	Lys	Lys	Phe	Ile	Asp	Phe	Ile	Asp	Thr	Cys	Leu	Ile	Lys
		260						265					270		
Thr	Tyr	Leu	Ser	Arg	Pro	Pro	Thr	Glu	Gln	Leu	Leu	Lys	Phe	Pro	Phe
		275					280					285			
Ile	Arg	Asp	Gln	Pro	Thr	Glu	Arg	Gln	Val	Arg	Ile	Gln	Leu	Lys	Asp
	290					295					300				
His	Ile	Asp	Arg	Ser	Arg	Lys	Lys	Arg	Gly	Glu	Lys	Glu	Glu	Thr	Glu
305					310					315					320
Tyr	Glu	Tyr	Ser	Gly	Ser	Glu	Glu	Glu	Asp	Asp	Ser	His	Gly	Glu	Glu
			325						330					335	
Gly	Glu	Pro	Ser	Ser	Ile	Met	Asn	Val	Pro	Gly	Glu	Ser	Thr	Leu	Arg
		340						345					350		
Arg	Glu	Phe	Leu	Arg	Leu	Gln	Gln	Glu	Asn	Lys	Ser	Asn	Ser	Glu	Ala
	355						360					365			
Leu	Lys	Gln	Gln	Gln	Gln	Leu	Gln	Gln	Gln	Gln	Gln	Arg	Asp	Pro	Glu
	370					375						380			
Ala	His	Ile	Lys	His	Leu	Leu	His	Gln	Arg	Gln	Arg	Arg	Ile	Glu	Glu
385					390					395					400
Gln	Lys	Glu	Glu	Arg	Arg	Arg	Val	Glu	Glu	Gln	Gln	Arg	Arg	Glu	Arg
			405						410					415	
Glu	Gln	Arg	Lys	Leu	Gln	Glu	Lys	Glu	Gln	Gln	Arg	Arg	Leu	Glu	Asp
		420						425					430		
Met	Gln	Ala	Leu	Arg	Arg	Glu	Glu	Glu	Arg	Arg	Gln	Ala	Glu	Arg	Glu
	435					440						445			
Gln	Glu	Tyr	Lys	Arg	Lys	Gln	Leu	Glu	Glu	Gln	Arg	Gln	Ser	Glu	Arg
	450					455					460				
Leu	Gln	Arg	Gln	Leu	Gln	Gln	Glu	His	Ala	Tyr	Leu	Lys	Ser	Leu	Gln
465					470					475					480
Gln	Gln	Gln	Gln	Gln	Gln	Gln	Leu	Gln	Lys	Gln	Gln	Gln	Gln	Gln	Leu
			485						490					495	
Leu	Pro	Gly	Asp	Arg	Lys	Pro	Leu	Tyr	His	Tyr	Gly	Arg	Gly	Met	Asn
		500						505					510		
Pro	Ala	Asp	Lys	Pro	Ala	Trp	Ala	Arg	Glu	Val	Glu	Glu	Arg	Thr	Arg
		515					520					525			

Met	Asn	Lys	Gln	Gln	Asn	Ser	Pro	Leu	Ala	Lys	Ser	Lys	Pro	Gly	Ser
530						535					540				
Thr	Gly	Pro	Glu	Pro	Pro	Ile	Pro	Gln	Ala	Ser	Pro	Gly	Pro	Pro	Gly
545					550					555					560
Pro	Leu	Ser	Gln	Thr	Pro	Pro	Met	Gln	Arg	Pro	Val	Glu	Pro	Gln	Glu
				565					570						575
Gly	Pro	His	Lys	Ser	Leu	Val	Ala	His	Arg	Val	Pro	Leu	Lys	Pro	Tyr
			580					585					590		
Ala	Ala	Pro	Val	Pro	Arg	Ser	Gln	Ser	Leu	Gln	Asp	Gln	Pro	Thr	Arg
		595					600					605			
Asn	Leu	Ala	Ala	Phe	Pro	Ala	Ser	His	Asp	Pro	Asp	Pro	Ala	Ile	Pro
610						615					620				
Ala	Pro	Thr	Ala	Thr	Pro	Ser	Ala	Arg	Gly	Ala	Val	Ile	Arg	Gln	Asn
625					630					635					640
Ser	Asp	Pro	Thr	Ser	Glu	Gly	Pro	Gly	Pro	Ser	Pro	Asn	Pro	Pro	Ala
				645					650					655	
Trp	Val	Arg	Pro	Asp	Asn	Glu	Ala	Pro	Pro	Lys	Val	Pro	Gln	Arg	Thr
			660					665					670		
Ser	Ser	Ile	Ala	Thr	Ala	Leu	Asn	Thr	Ser	Gly	Ala	Gly	Gly	Ser	Arg
		675					680					685			
Pro	Ala	Gln	Ala	Val	Arg	Ala	Ser	Asn	Pro	Asp	Leu	Arg	Arg	Ser	Asp
690						695					700				
Pro	Gly	Trp	Glu	Arg	Ser	Asp	Ser	Val	Leu	Pro	Ala	Ser	His	Gly	His
705					710					715					720
Leu	Pro	Gln	Ala	Gly	Ser	Leu	Glu	Arg	Asn	Arg	Val	Gly	Val	Ser	Ser
				725					730					735	
Lys	Pro	Asp	Ser	Ser	Pro	Val	Leu	Ser	Pro	Gly	Asn	Lys	Ala	Lys	Pro
			740					745					750		
Asp	Asp	His	Arg	Ser	Arg	Pro	Gly	Arg	Pro	Ala	Ser	Tyr	Lys	Arg	Ala
		755					760					765			
Ile	Gly	Glu	Asp	Phe	Val	Leu	Leu	Lys	Glu	Arg	Thr	Leu	Asp	Glu	Ala
770						775					780				
Pro	Arg	Pro	Pro	Lys	Lys	Ala	Met	Asp	Tyr	Ser	Ser	Ser	Ser	Glu	Glu
785					790					795					800
Val	Glu	Ser	Ser	Glu	Asp	Asp	Glu	Glu	Glu	Gly	Glu	Gly	Gly	Pro	Ala
				805					810					815	
Glu	Gly	Ser	Arg	Asp	Thr	Pro	Gly	Gly	Arg	Ser	Asp	Gly	Asp	Thr	Asp
			820					825					830		
Ser	Val	Ser	Thr	Met	Val	Val	His	Asp	Val	Glu	Glu	Ile	Thr	Gly	Thr
		835					840					845			
Gln	Pro	Pro	Tyr	Gly	Gly	Gly	Thr	Met	Val	Val	Gln	Arg	Thr	Pro	Glu
850						855					860				
Glu	Glu	Arg	Asn	Leu	Leu	His	Ala	Asp	Ser	Asn	Gly	Tyr	Thr	Asn	Leu
865					870					875					880
Pro	Asp	Val	Val	Gln	Pro	Ser	His	Ser	Pro	Thr	Glu	Asn	Ser	Lys	Gly
				885					890					895	
Gln	Ser	Pro	Pro	Ser	Lys	Asp	Gly	Ser	Gly	Asp	Tyr	Gln	Ser	Arg	Gly
			900					905						910	
Leu	Val	Lys	Ala	Pro	Gly	Lys	Ser	Ser	Phe	Thr	Met	Phe	Val	Asp	Leu
		915					920					925			
Gly	Ile	Tyr	Gln	Pro	Gly	Gly	Ser	Gly	Asp	Ser	Ile	Pro	Ile	Thr	Ala
930						935					940				
Leu	Val	Gly	Gly	Glu	Gly	Thr	Arg	Leu	Asp	Gln	Leu	Gln	Tyr	Asp	Val
945					950					955					960
Arg	Lys	Gly	Ser	Val	Val	Asn	Val	Asn	Pro	Thr	Asn	Thr	Arg	Ala	His
				965					970					975	
Ser	Glu	Thr	Pro	Glu	Ile	Arg	Lys	Tyr	Lys	Lys	Arg	Phe	Asn	Ser	Glu
			980					985					990		
Ile	Leu	Cys	Ala	Ala	Leu	Trp	Gly	Val	Asn	Leu	Leu	Val	Gly	Thr	Glu
		995					1000					1005			
Asn	Gly	Leu	Met	Leu	Leu	Asp	Arg	Ser	Gly	Gln	Gly	Lys	Val	Tyr	Gly
1010						1015					1020				
Leu	Ile	Gly	Arg	Arg	Arg	Phe	Gln	Gln	Met	Asp	Val	Leu	Glu	Gly	Leu
1025					1030					1035					1040

Asn Leu Leu Ile Thr Ile Ser Gly Lys Arg Asn Lys Leu Arg Val Tyr
 1045 1050 1055
 Tyr Leu Ser Trp Leu Arg Asn Lys Ile Leu His Asn Asp Pro Glu Val
 1060 1065 1070
 Glu Lys Lys Gln Gly Trp Thr Thr Val Gly Asp Met Glu Gly Cys Gly
 1075 1080 1085
 His Tyr Arg Val Val Lys Tyr Glu Arg Ile Lys Phe Leu Val Ile Ala
 1090 1095 1100
 Leu Lys Ser Ser Val Glu Val Tyr Ala Trp Ala Pro Lys Pro Tyr His
 1105 1110 1115 1120
 Lys Phe Met Ala Phe Lys Ser Phe Ala Asp Leu Pro His Arg Pro Leu
 1125 1130 1135
 Leu Val Asp Leu Thr Val Glu Glu Gly Gln Arg Leu Lys Val Ile Tyr
 1140 1145 1150
 Gly Ser Ser Ala Gly Phe His Ala Val Asp Val Asp Ser Gly Asn Ser
 1155 1160 1165
 Tyr Asp Ile Tyr Ile Pro Val His Ile Gln Ser Gln Ile Thr Pro His
 1170 1175 1180
 Ala Ile Ile Phe Leu Pro Asn Thr Asp Gly Met Glu Met Leu Leu Cys
 1185 1190 1195 1200
 Tyr Glu Asp Glu Gly Val Tyr Val Asn Thr Tyr Gly Arg Ile Ile Lys
 1205 1210 1215
 Asp Val Val Leu Gln Trp Gly Glu Met Pro Thr Ser Val Ala Tyr Ile
 1220 1225 1230
 Cys Ser Asn Gln Ile Met Gly Trp Gly Glu Lys Ala Ile Glu Ile Arg
 1235 1240 1245
 Ser Val Glu Thr Gly His Leu Asp Gly Val Phe Met His Lys Arg Ala
 1250 1255 1260
 Gln Arg Leu Lys Phe Leu Cys Glu Arg Asn Asp Lys Val Phe Phe Ala
 1265 1270 1275 1280
 Ser Val Arg Ser Gly Gly Ser Ser Gln Val Tyr Phe Met Thr Leu Asn
 1285 1290 1295
 Arg Asn Cys Ile Met Asn Trp *
 1300 1303

<210> 1816
 <211> 226
 <212> PRT
 <213> Homo sapiens

<400> 1816
 Met Asn Gly Ile Arg Leu Gly Thr Tyr Gly Leu Ala Glu Ala Gly Gly
 1 5 10 15
 Tyr Leu His Thr Ala Glu Gly Thr His Ser Pro Ala Arg Ser Ala Ala
 20 25 30
 Ala Gly Ala Met Ala Gly Val Met Gly Ala Tyr Leu Gly Ser Pro Ile
 35 40 45
 Tyr Met Val Lys Thr His Leu Gln Ala Gln Ala Ala Ser Glu Ile Ala
 50 55 60
 Val Gly His Gln Tyr Lys His Gln Gly Met Phe Gln Ala Leu Thr Glu
 65 70 75 80
 Ile Gly Gln Lys His Gly Leu Val Gly Leu Trp Arg Gly Ala Leu Gly
 85 90 95
 Gly Leu Pro Arg Val Ile Val Gly Ser Ser Thr Gln Leu Cys Thr Phe
 100 105 110
 Ser Ser Thr Lys Asp Leu Leu Ser Gln Trp Glu Ile Phe Pro Pro Gln
 115 120 125
 Ser Trp Lys Leu Ala Leu Val Ala Ala Met Met Ser Gly Ile Ala Val
 130 135 140
 Val Leu Ala Met Ala Pro Phe Asp Val Ala Cys Thr Arg Leu Tyr Asn
 145 150 155 160

Gln Pro Thr Asp Ala Gln Gly Lys Gly Leu Met Tyr Arg Gly Ile Leu
 165 170 175
 Asp Ala Leu Leu Gln Thr Ala Arg Thr Glu Gly Ile Phe Gly Met Tyr
 180 185 190
 Lys Gly Ile Gly Ala Ser Tyr Phe Arg Leu Gly Pro His Thr Ile Leu
 195 200 205
 Ser Leu Phe Phe Trp Asp Gln Leu Arg Ser Leu Tyr Tyr Thr Asp Thr
 210 215 220
 Lys *
 225

<210> 1817
 <211> 195
 <212> PRT
 <213> Homo sapiens

<400> 1817
 Met Leu Ala Tyr Cys Val Gln Asp Ala Thr Val Val Asp Val Glu Lys
 1 5 10 15
 Arg Arg Asn Pro Ser Lys His Tyr Val Tyr Ile Ile Asn Val Thr Trp
 20 25 30
 Ser Asp Ser Thr Ser Gln Thr Ile Tyr Arg Arg Tyr Ser Lys Phe Phe
 35 40 45
 Asp Leu Gln Met Gln Leu Leu Asp Lys Phe Pro Ile Glu Gly Gly Gln
 50 55 60
 Lys Asp Pro Lys Gln Arg Ile Ile Pro Phe Leu Pro Gly Lys Ile Leu
 65 70 75 80
 Phe Arg Arg Ser His Ile Arg Asp Val Ala Val Lys Arg Leu Lys Pro
 85 90 95
 Ile Asp Glu Tyr Cys Arg Ala Leu Val Arg Leu Pro Pro His Ile Ser
 100 105 110
 Gln Cys Asp Glu Val Phe Arg Phe Phe Glu Ala Arg Pro Glu Asp Val
 115 120 125
 Asn Pro Pro Lys Glu Gln Gly Pro Ser Pro Pro Asp Ala Val Leu Pro
 130 135 140
 Tyr Gly Val Asn Lys Gly Lys Gln Glu Leu Lys Ala Gly Pro Asn Trp
 145 150 155 160
 Pro Gly Arg Thr His His Val Val Asn Cys Val Thr Gln Lys Cys Leu
 165 170 175
 Phe Val Phe His Phe Lys Phe Ser Ser Ser Gly Asn Lys Glu Ser Lys
 180 185 190
 Ser Leu *
 194

<210> 1818
 <211> 700
 <212> PRT
 <213> Homo sapiens

<400> 1818
 Met Ala Asp Ala Gly Ile Arg Arg Val Val Pro Ser Asp Leu Tyr Pro
 1 5 10 15
 Leu Val Leu Gly Phe Leu Arg Asp Asn Gln Leu Ser Glu Val Ala Asn
 20 25 30
 Lys Phe Ala Lys Ala Thr Gly Ala Thr Gln Gln Asp Ala Asn Ala Ser
 35 40 45
 Ser Leu Leu Asp Ile Tyr Ser Phe Trp Leu Lys Ser Ala Lys Val Pro
 50 55 60

Glu	Arg	Lys	Leu	Gln	Ala	Asn	Gly	Pro	Val	Ala	Lys	Lys	Ala	Lys	Lys	65	70	75	80
Lys	Ala	Ser	Ser	Ser	Asp	Ser	Glu	Asp	Ser	Ser	Glu	Glu	Glu	Glu	Glu	85	90	95	
Val	Gln	Gly	Pro	Pro	Ala	Lys	Lys	Ala	Ala	Val	Pro	Ala	Lys	Arg	Val	100	105	110	
Gly	Leu	Pro	Pro	Gly	Lys	Ala	Ala	Ala	Lys	Ala	Ser	Glu	Ser	Ser	Ser	115	120	125	
Ser	Glu	Glu	Ser	Ser	Asp	Asp	Asp	Asp	Glu	Glu	Asp	Gln	Lys	Lys	Gln	130	135	140	
Pro	Val	Gln	Lys	Gly	Val	Lys	Pro	Gln	Ala	Lys	Ala	Ala	Lys	Ala	Pro	145	150	155	160
Pro	Lys	Lys	Ala	Lys	Ser	Ser	Asp	Ser	Asp	Ser	Asp	Ser	Ser	Ser	Glu	165	170	175	
Asp	Glu	Pro	Pro	Lys	Asn	Gln	Lys	Pro	Lys	Ile	Thr	Pro	Val	Thr	Val	180	185	190	
Lys	Ala	Gln	Thr	Lys	Ala	Pro	Pro	Lys	Pro	Ala	Arg	Ala	Ala	Pro	Lys	195	200	205	
Ile	Ala	Asn	Gly	Lys	Ala	Ala	Ser	Ser	Ser	Ser	Ser	Ser	Ser	Ser	Ser	210	215	220	
Ser	Ser	Ser	Asp	Asp	Ser	Glu	Glu	Glu	Lys	Ala	Ala	Ala	Thr	Pro	Lys	225	230	235	240
Lys	Thr	Val	Pro	Lys	Lys	Gln	Val	Val	Ala	Lys	Ala	Pro	Val	Lys	Ala	245	250	255	
Ala	Thr	Thr	Pro	Thr	Arg	Lys	Ser	Ser	Ser	Ser	Glu	Asp	Ser	Ser	Ser	260	265	270	
Asp	Glu	Glu	Glu	Glu	Gln	Lys	Lys	Pro	Met	Lys	Asn	Lys	Pro	Gly	Pro	275	280	285	
Tyr	Ser	Ser	Val	Pro	Pro	Pro	Ser	Ala	Pro	Pro	Pro	Lys	Lys	Ser	Leu	290	295	300	
Gly	Thr	Gln	Pro	Pro	Lys	Lys	Ala	Val	Glu	Lys	Gln	Gln	Pro	Val	Glu	305	310	315	320
Ser	Ser	Glu	Asp	Ser	Ser	Asp	Glu	Ser	Asp	Ser	Ser	Ser	Glu	Glu	Glu	325	330	335	
Lys	Lys	Pro	Pro	Thr	Lys	Ala	Val	Val	Ser	Lys	Ala	Thr	Thr	Lys	Pro	340	345	350	
Pro	Pro	Ala	Lys	Lys	Ala	Ala	Glu	Ser	Ser	Ser	Asp	Ser	Ser	Asp	Ser	355	360	365	
Asp	Ser	Ser	Glu	Asp	Asp	Glu	Ala	Pro	Ser	Lys	Pro	Ala	Gly	Thr	Thr	370	375	380	
Lys	Asn	Ser	Ser	Asn	Lys	Pro	Ala	Val	Thr	Thr	Lys	Ser	Pro	Ala	Val	385	390	395	400
Lys	Pro	Ala	Ala	Ala	Pro	Lys	Gln	Pro	Val	Gly	Gly	Gly	Gln	Lys	Leu	405	410	415	
Leu	Thr	Arg	Lys	Ala	Asp	Ser	Ser	Ser	Ser	Glu	Glu	Glu	Ser	Ser	Ser	420	425	430	
Ser	Glu	Glu	Glu	Lys	Thr	Lys	Lys	Met	Val	Ala	Thr	Thr	Lys	Pro	Lys	435	440	445	
Ala	Thr	Ala	Lys	Ala	Ala	Leu	Ser	Leu	Pro	Ala	Lys	Gln	Ala	Pro	Gln	450	455	460	
Gly	Ser	Arg	Asp	Ser	Ser	Ser	Asp	Ser	Asp	Ser	Ser	Ser	Ser	Glu	Glu	465	470	475	480
Glu	Glu	Glu	Lys	Thr	Ser	Lys	Ser	Ala	Val	Lys	Lys	Lys	Pro	Gln	Lys	485	490	495	
Val	Ala	Gly	Gly	Ala	Ala	Pro	Ser	Lys	Pro	Ala	Ser	Ala	Lys	Lys	Gly	500	505	510	
Lys	Ala	Glu	Ser	Ser	Asn	Ser	Ser	Ser	Ser	Asp	Asp	Ser	Ser	Glu	Glu	515	520	525	
Glu	Glu	Glu	Lys	Leu	Lys	Gly	Lys	Gly	Ser	Pro	Arg	Pro	Gln	Ala	Pro	530	535	540	
Lys	Ala	Asn	Gly	Thr	Ser	Ala	Leu	Thr	Ala	Gln	Asn	Gly	Lys	Ala	Ala	545	550	555	560
Lys	Asn	Ser	Glu	Glu	Glu	Glu	Glu	Glu	Lys	Lys	Lys	Ala	Ala	Val	Val	565	570	575	

Val	Ser	Lys	Ser	Gly	Ser	Leu	Lys	Lys	Arg	Lys	Gln	Asn	Glu	Ala	Ala	
			580					585					590			
Lys	Glu	Ala	Glu	Thr	Pro	Gln	Ala	Lys	Lys	Ile	Lys	Leu	Gln	Thr	Pro	
		595					600					605				
Asn	Thr	Phe	Pro	Lys	Arg	Lys	Lys	Gly	Glu	Lys	Arg	Ala	Ser	Ser	Pro	
	610					615					620					
Phe	Arg	Arg	Val	Arg	Glu	Glu	Glu	Ile	Glu	Val	Asp	Ser	Arg	Val	Ala	
625					630					635					640	
Asp	Asn	Ser	Phe	Asp	Ala	Lys	Arg	Gly	Ala	Ala	Gly	Asp	Trp	Gly	Glu	
				645					650					655		
Arg	Ala	Asn	Gln	Val	Leu	Lys	Phe	Thr	Lys	Gly	Lys	Ser	Phe	Arg	His	
			660					665					670			
Glu	Lys	Thr	Lys	Lys	Lys	Arg	Gly	Ser	Tyr	Arg	Gly	Gly	Ser	Ile	Ser	
		675				680						685				
Val	Gln	Val	Asn	Ser	Ile	Lys	Phe	Asp	Ser	Glu	*					
	690					695				699						

<210> 1819

<211> 1724

<212> PRT

<213> Homo sapiens

<400> 1819

Met	Thr	Ser	Arg	Lys	Leu	Ala	Ser	Ala	Thr	Ala	Asn	Asp	Ser	Ala	Asn	
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Pro	Leu	His	Leu	Ser	Ala	Ala	Pro	Glu	Asn	Ser	Arg	Gly	Pro	Ala	Leu	
			20					25					30			
Ser	Ala	Glu	His	Thr	Ser	Ser	Leu	Val	Pro	Ser	Leu	His	Ile	Thr	Thr	
	35						40					45				
Leu	Gly	Gln	Glu	Gln	Ala	Ile	Leu	Ser	Gly	Ala	Val	Pro	Ala	Ser	Pro	
	50					55					60					
Ser	Thr	Gly	Thr	Ala	Asp	Phe	Pro	Ser	Ile	Leu	Thr	Phe	Leu	Gln	Pro	
65					70					75					80	
Thr	Glu	Asn	His	Ala	Ser	Pro	Ser	Pro	Val	Pro	Glu	Met	Pro	Thr	Leu	
				85					90					95		
Pro	Ala	Glu	Gly	Ser	Asp	Gly	Ser	Pro	Pro	Ala	Thr	Arg	Asp	Leu	Leu	
			100				105						110			
Leu	Ser	Ser	Lys	Val	Pro	Asn	Leu	Leu	Ser	Thr	Ser	Trp	Thr	Phe	Pro	
	115						120					125				
Arg	Trp	Lys	Lys	Asp	Ser	Val	Thr	Ala	Ile	Leu	Gly	Lys	Asn	Glu	Glu	
	130					135				140						
Ala	Asn	Val	Thr	Ile	Pro	Leu	Gln	Ala	Phe	Pro	Arg	Lys	Glu	Val	Leu	
145					150					155					160	
Ser	Leu	His	Thr	Val	Asn	Gly	Phe	Val	Ser	Asp	Phe	Ser	Thr	Gly	Ser	
				165					170					175		
Val	Ser	Ser	Pro	Ile	Ile	Thr	Ala	Pro	Arg	Thr	Asn	Pro	Leu	Pro	Ser	
			180					185					190			
Gly	Pro	Pro	Leu	Pro	Ser	Ile	Leu	Ser	Ile	Gln	Ala	Thr	Gln	Thr	Val	
	195					200						205				
Phe	Pro	Ser	Leu	Leu	Ala	Phe	Ser	Ser	Thr	Lys	Pro	Glu	Val	Tyr	Ala	
	210					215					220					
Ala	Ala	Val	Asp	His	Ser	Gly	Leu	Pro	Ala	Ser	Ala	Pro	Lys	Gln	Val	
225					230					235					240	
Arg	Ala	Ser	Pro	Ser	Ser	Met	Asp	Val	Tyr	Asp	Ser	Leu	Thr	Ile	Gly	
				245					250					255		
Asp	Met	Lys	Lys	Pro	Ala	Thr	Thr	Asp	Val	Phe	Trp	Ser	Ser	Leu	Ser	
		260						265					270			
Ala	Glu	Thr	Gly	Ser	Leu	Ser	Thr	Glu	Ser	Ile	Ile	Ser	Gly	Leu	Gln	
	275						280					285				
Gln	Gln	Thr	Asn	Tyr	Asp	Leu	Asn	Gly	His	Thr	Ile	Ser	Thr	Thr	Ser	
	290					295					300					

Trp	Glu	Thr	His	Leu	Ala	Pro	Thr	Ala	Pro	Pro	Asn	Gly	Leu	Thr	Ser
305					310					315					320
Ala	Ala	Asp	Ala	Ile	Lys	Ser	Gln	Asp	Phe	Lys	Asp	Thr	Ala	Gly	His
				325					330					335	
Ser	Val	Thr	Ala	Glu	Gly	Phe	Ser	Ile	Gln	Asp	Leu	Val	Leu	Gly	Thr
			340					345					350		
Ser	Ile	Glu	Gln	Pro	Val	Gln	Gln	Ser	Asp	Met	Thr	Met	Val	Gly	Ser
		355					360					365			
His	Ile	Asp	Leu	Trp	Pro	Thr	Ser	Asn	Asn	Asn	His	Ser	Arg	Asp	Phe
	370					375					380				
Gln	Thr	Ala	Glu	Val	Ala	Tyr	Tyr	Ser	Pro	Thr	Thr	Arg	His	Ser	Val
385					390					395					400
Ser	His	Pro	Gln	Leu	Gln	Leu	Pro	Asn	Gln	Pro	Ala	His	Pro	Leu	Leu
				405					410					415	
Leu	Thr	Ser	Pro	Gly	Pro	Thr	Ser	Thr	Gly	Ser	Leu	Gln	Glu	Met	Leu
			420					425					430		
Ser	Asp	Gly	Thr	Asp	Thr	Gly	Ser	Glu	Ile	Ser	Ser	Asp	Ile	Asn	Ser
	435					440						445			
Ser	Pro	Glu	Arg	Asn	Ala	Ser	Thr	Pro	Phe	Gln	Asn	Ile	Leu	Gly	Tyr
	450					455					460				
His	Ser	Ala	Ala	Glu	Ser	Ser	Ile	Ser	Thr	Ser	Val	Phe	Pro	Arg	Thr
465					470					475					480
Ser	Ser	Arg	Val	Leu	Arg	Ala	Ser	Gln	His	Pro	Lys	Lys	Trp	Thr	Gly
				485					490					495	
Ala	Ala	Thr	Asn	Ala	Ala	Asp	Thr	Val	Ser	Ser	Lys	Val	Gln	Pro	Thr
			500					505					510		
Ala	Ala	Ala	Ala	Val	Thr	Leu	Phe	Leu	Arg	Lys	Ser	Ser	Pro	Pro	Ala
	515						520					525			
Leu	Ser	Ala	Ala	Leu	Val	Ala	Lys	Gly	Thr	Ser	Ser	Ser	Pro	Leu	Ala
	530					535					540				
Val	Ala	Ser	Gly	Pro	Ala	Lys	Ser	Ser	Ser	Met	Thr	Thr	Leu	Ala	Lys
545					550					555					560
Asn	Val	Thr	Asn	Lys	Ala	Ala	Ser	Gly	Pro	Lys	Arg	Thr	Pro	Gly	Ala
				565					570					575	
Val	His	Thr	Ala	Phe	Pro	Phe	Thr	Pro	Thr	Tyr	Met	Tyr	Ala	Arg	Thr
			580					585					590		
Gly	His	Thr	Thr	Ser	Thr	His	Thr	Ala	Met	Gln	Gly	Asn	Met	Asp	Thr
	595						600					605			
Ala	Ser	Gly	Leu	Leu	Ser	Thr	Thr	Tyr	Leu	Pro	Arg	Lys	Pro	Gln	Ala
	610					615					620				
Met	His	Thr	Gly	Leu	Pro	Asn	Pro	Thr	Asn	Leu	Glu	Met	Pro	Arg	Ala
625					630					635					640
Ser	Thr	Pro	Arg	Pro	Leu	Thr	Val	Thr	Ala	Ala	Leu	Thr	Ser	Ile	Thr
				645					650					655	
Ala	Ser	Val	Lys	Ala	Thr	Arg	Leu	Pro	Pro	Leu	Arg	Ala	Glu	Asn	Thr
			660					665					670		
Asp	Ala	Val	Leu	Pro	Ala	Ala	Ser	Ala	Ala	Val	Val	Thr	Thr	Gly	Lys
		675					680					685			
Met	Ala	Ser	Asn	Leu	Glu	Cys	Gln	Met	Ser	Ser	Lys	Leu	Leu	Val	Lys
	690					695					700				
Thr	Val	Leu	Phe	Leu	Thr	Gln	Arg	Arg	Val	Gln	Ile	Ser	Glu	Ser	Leu
705					710					715					720
Lys	Phe	Ser	Ile	Ala	Lys	Gly	Leu	Thr	Gln	Ala	Leu	Arg	Lys	Ala	Phe
				725					730					735	
His	Gln	Asn	Asp	Val	Ser	Ala	His	Val	Asp	Ile	Leu	Glu	Tyr	Ser	His
			740					745					750		
Asn	Val	Thr	Val	Gly	Tyr	Tyr	Ala	Thr	Lys	Gly	Lys	Leu	Val	Tyr	Leu
		755					760					765			
Pro	Ala	Val	Val	Ile	Glu	Met	Leu	Gly	Val	Tyr	Gly	Val	Ser	Asn	Val
	770					775						780			
Thr	Ala	Asp	Leu	Lys	Gln	His	Thr	Pro	His	Leu	Gln	Ser	Val	Ala	Val
785					790					795					800
Leu	Ala	Ser	Pro	Trp	Asn	Pro	Gln	Pro	Ala	Gly	Tyr	Phe	Gln	Leu	Lys
				805					810					815	

Thr	Val	Leu	Gln	Phe	Val	Ser	Gln	Ala	Asp	Asn	Ile	Gln	Ser	Cys	Lys
			820					825					830		
Phe	Ala	Gln	Thr	Met	Glu	Gln	Arg	Leu	Gln	Lys	Ala	Phe	Gln	Asp	Ala
			835				840						845		
Glu	Arg	Lys	Val	Leu	Asn	Thr	Lys	Ser	Asn	Leu	Thr	Ile	Gln	Ile	Val
			850				855					860			
Ser	Thr	Ser	Asn	Ala	Ser	Gln	Ala	Val	Thr	Leu	Val	Tyr	Val	Val	Gly
865					870						875				880
Asn	Gln	Ser	Thr	Phe	Leu	Asn	Gly	Thr	Val	Ala	Ser	Ser	Leu	Leu	Ser
				885					890					895	
Gln	Leu	Ser	Ala	Glu	Leu	Val	Gly	Phe	Tyr	Leu	Thr	Tyr	Pro	Pro	Leu
			900					905						910	
Thr	Ile	Ala	Glu	Pro	Leu	Glu	Tyr	Pro	Asn	Leu	Asp	Ile	Ser	Glu	Thr
			915					920					925		
Thr	Arg	Asp	Tyr	Trp	Val	Ile	Thr	Val	Leu	Gln	Gly	Val	Asp	Asn	Ser
			930				935					940			
Leu	Val	Gly	Leu	His	Asn	Gln	Ser	Phe	Ala	Arg	Val	Met	Glu	Gln	Arg
945					950					955					960
Leu	Ala	Gln	Leu	Phe	Met	Met	Ser	Gln	Gln	Gln	Gly	Arg	Arg	Phe	Lys
				965					970					975	
Arg	Ala	Thr	Thr	Leu	Gly	Ser	Tyr	Thr	Val	Gln	Met	Val	Lys	Met	Gln
			980					985					990		
Arg	Val	Pro	Gly	Pro	Lys	Asp	Pro	Ala	Glu	Leu	Thr	Tyr	Tyr	Thr	Leu
			995				1000						1005		
Tyr	Asn	Gly	Lys	Pro	Leu	Leu	Gly	Thr	Val	Ala	Ala	Lys	Ile	Leu	Ser
	1010					1015						1020			
Thr	Ile	Asp	Ser	Gln	Arg	Met	Ala	Leu	Thr	Leu	His	His	Val	Val	Leu
1025					1030						1035				1040
Leu	Gln	Ala	Asp	Pro	Val	Val	Lys	Asn	Pro	Pro	Asn	Asn	Leu	Trp	Ile
				1045					1050					1055	
Ile	Ala	Ala	Val	Leu	Ala	Pro	Ile	Ala	Val	Val	Thr	Val	Ile	Ile	Ile
			1060					1065					1070		
Ile	Ile	Thr	Ala	Val	Leu	Cys	Arg	Lys	Asn	Lys	Asn	Asp	Phe	Lys	Pro
		1075					1080					1085			
Asp	Thr	Met	Ile	Asn	Leu	Pro	Gln	Arg	Ala	Lys	Pro	Val	Gln	Gly	Phe
	1090					1095					1100				
Asp	Tyr	Ala	Lys	Gln	His	Leu	Gly	Gln	Gln	Gly	Ala	Asp	Glu	Glu	Val
1105					1110					1115					1120
Ile	Pro	Val	Thr	Gln	Glu	Thr	Val	Val	Leu	Pro	Leu	Pro	Ile	Arg	Asp
				1125					1130					1135	
Ala	Pro	Gln	Glu	Arg	Asp	Val	Ala	Gln	Asp	Gly	Ser	Thr	Ile	Lys	Thr
			1140					1145					1150		
Ala	Lys	Ser	Thr	Glu	Thr	Arg	Lys	Ser	Arg	Ser	Pro	Ser	Glu	Asn	Gly
		1155					1160					1165			
Ser	Val	Ile	Ser	Asn	Glu	Ser	Gly	Lys	Pro	Ser	Ser	Gly	Arg	Arg	Ser
	1170					1175					1180				
Pro	Gln	Asn	Val	Met	Ala	Gln	Gln	Lys	Val	Thr	Lys	Glu	Glu	Ala	Arg
1185				1190							1195				1200
Lys	Arg	Asn	Val	Pro	Ala	Ser	Asp	Glu	Glu	Glu	Gly	Ala	Val	Leu	Phe
				1205					1210					1215	
Asp	Asn	Ser	Ser	Lys	Val	Ala	Ala	Glu	Pro	Phe	Asp	Thr	Ser	Ser	Gly
			1220					1225					1230		
Ser	Val	Gln	Leu	Ile	Ala	Ile	Lys	Pro	Thr	Ala	Leu	Pro	Met	Val	Pro
		1235					1240					1245			
Pro	Thr	Ser	Asp	Arg	Ser	Gln	Glu	Ser	Ser	Ala	Val	Leu	Asn	Gly	Glu
					1255						1260				
Val	Asn	Lys	Ala	Leu	Lys	Gln	Lys	Ser	Asp	Ile	Glu	His	Tyr	Arg	Asn
1265					1270						1275				1280
Lys	Leu	Arg	Leu	Lys	Ala	Lys	Arg	Lys	Gly	Tyr	Tyr	Asp	Phe	Pro	Ala
				1285					1290					1295	
Val	Glu	Thr	Ser	Lys	Gly	Leu	Thr	Glu	Arg	Lys	Lys	Met	Tyr	Glu	Lys
			1300					1305					1310		
Ala	Pro	Lys	Glu	Met	Glu	His	Val	Leu	Asp	Pro	Asp	Ser	Glu	Leu	Cys
		1315					1320					1325			

Ala Pro Phe Thr Glu Ser Lys Asn Arg Gln Gln Met Lys Asn Ser Val
 1330 1335 1340
 Tyr Arg Ser Arg Gln Ser Leu Asn Ser Pro Ser Pro Gly Glu Thr Glu
 1345 1350 1355 1360
 Met Asp Leu Leu Val Thr Arg Glu Arg Pro Arg Arg Gly Ile Arg Asn
 1365 1370 1375
 Ser Gly Tyr Asp Thr Glu Pro Glu Ile Ile Glu Glu Thr Asn Ile Asp
 1380 1385 1390
 Arg Val Pro Glu Pro Arg Gly Tyr Ser Arg Ser Arg Gln Val Lys Gly
 1395 1400 1405
 His Ser Glu Thr Ser Thr Leu Ser Ser Gln Pro Ser Ile Asp Glu Val
 1410 1415 1420
 Arg Gln Gln Met His Met Leu Leu Glu Glu Ala Phe Ser Leu Ala Ser
 1425 1430 1435 1440
 Ala Gly His Ala Gly Gln Ser Arg His Gln Glu Ala Tyr Gly Ser Ala
 1445 1450 1455
 Gln His Leu Pro Tyr Ser Glu Val Val Thr Ser Ala Pro Gly Thr Met
 1460 1465 1470
 Thr Arg Pro Arg Ala Gly Val Gln Trp Val Pro Thr Tyr Arg Pro Glu
 1475 1480 1485
 Met Tyr Gln Tyr Ser Leu Pro Arg Pro Ala Tyr Arg Phe Ser Gln Leu
 1490 1495 1500
 Pro Glu Met Val Met Gly Ser Pro Pro Pro Pro Val Pro Pro Arg Thr
 1505 1510 1515 1520
 Gly Pro Val Ala Val Ala Ser Leu Arg Arg Ser Thr Ser Asp Ile Gly
 1525 1530 1535
 Ser Lys Thr Arg Met Ala Glu Ser Thr Gly Pro Glu Pro Ala Gln Leu
 1540 1545 1550
 His Asp Ser Ala Ser Phe Thr Gln Met Ser Arg Gly Pro Val Ser Val
 1555 1560 1565
 Thr Gln Leu Asp Gln Ser Ala Leu Asn Tyr Ser Gly Asn Thr Val Pro
 1570 1575 1580
 Ala Val Phe Ala Ile Pro Ala Ala Asn Arg Pro Gly Phe Thr Gly Tyr
 1585 1590 1595 1600
 Phe Ile Pro Thr Pro Pro Ser Ser Tyr Arg Asn Gln Ala Trp Met Ser
 1605 1610 1615
 Tyr Ala Gly Glu Asn Glu Leu Pro Ser Gln Trp Ala Asp Ser Val Pro
 1620 1625 1630
 Leu Pro Gly Tyr Ile Glu Ala Tyr Pro Arg Ser Arg Tyr Pro Gln Ser
 1635 1640 1645
 Ser Pro Ser Arg Leu Pro Arg Gln Tyr Ser Gln Pro Ala Asn Leu His
 1650 1655 1660
 Pro Ser Leu Glu Gln Ala Pro Ala Pro Ser Thr Ala Ala Ser Gln Gln
 1665 1670 1675 1680
 Ser Leu Ala Glu Asn Asp Pro Ser Asp Ala Pro Leu Thr Asn Ile Ser
 1685 1690 1695
 Thr Ala Ala Leu Val Lys Ala Ile Arg Glu Glu Val Ala Lys Leu Ala
 1700 1705 1710
 Lys Lys Gln Thr Asp Met Phe Glu Phe Gln Val *
 1715 1720 1723

<210> 1820
 <211> 582
 <212> PRT
 <213> Homo sapiens

<400> 1820
 Met Thr Gly Phe Met Lys Gly Leu Tyr Thr Asp Ala Glu Met Lys Ser
 1 5 10 15
 Asp Asn Val Lys Asp Lys Asp Ala Lys Ile Ser Phe Leu Gln Lys Ala
 20 25 30

Ile	Asp	Val	Val	Val	Met	Val	Ser	Gly	Glu	Pro	Leu	Leu	Ala	Lys	Pro
		35					40					45			
Ala	Arg	Ile	Val	Ala	Gly	His	Glu	Pro	Glu	Arg	Thr	Asn	Glu	Leu	Leu
	50					55					60				
Gln	Ile	Ile	Gly	Lys	Cys	Cys	Leu	Asn	Lys	Leu	Ser	Ser	Asp	Asp	Ala
65				70						75					80
Val	Arg	Arg	Val	Leu	Ala	Gly	Glu	Lys	Gly	Glu	Val	Lys	Gly	Arg	Ala
			85						90					95	
Ser	Leu	Thr	Ser	Arg	Ser	Gln	Glu	Leu	Asp	Asn	Lys	Asn	Val	Arg	Glu
			100					105					110		
Glu	Glu	Ser	Arg	Val	His	Lys	Asn	Thr	Glu	Asp	Arg	Gly	Asp	Ala	Glu
		115					120					125			
Ile	Lys	Glu	Arg	Ser	Thr	Ser	Arg	Asp	Arg	Lys	Gln	Lys	Glu	Glu	Leu
130						135					140				
Lys	Glu	Asp	Arg	Lys	Pro	Arg	Glu	Lys	Asp	Lys	Asp	Lys	Glu	Lys	Ala
145					150					155					160
Lys	Glu	Asn	Gly	Gly	Asn	Arg	His	Arg	Glu	Gly	Glu	Arg	Glu	Arg	Ala
			165						170					175	
Lys	Ala	Arg	Ala	Arg	Pro	Asp	Asn	Glu	Arg	Gln	Lys	Asp	Arg	Gly	Asn
			180					185					190		
Arg	Glu	Arg	Asp	Arg	Asp	Ser	Glu	Arg	Lys	Lys	Glu	Thr	Glu	Arg	Lys
		195					200					205			
Ser	Glu	Gly	Gly	Lys	Glu	Lys	Glu	Arg	Leu	Arg	Asp	Arg	Asp	Arg	Glu
210						215					220				
Arg	Asp	Arg	Asp	Lys	Gly	Lys	Asp	Arg	Asp	Arg	Arg	Arg	Val	Lys	Asn
225					230					235					240
Gly	Glu	His	Ser	Trp	Asp	Leu	Asp	Arg	Glu	Asn	Asn	Arg	Glu	His	Asp
			245						250					255	
Lys	Pro	Glu	Lys	Lys	Ser	Ala	Ser	Ser	Gly	Glu	Met	Ser	Lys	Lys	Leu
			260					265					270		
Ser	Asp	Gly	Thr	Phe	Lys	Asp	Ser	Lys	Ala	Glu	Thr	Glu	Thr	Glu	Ile
		275					280					285			
Ser	Thr	Arg	Ala	Ser	Lys	Ser	Leu	Thr	Thr	Lys	Thr	Ser	Lys	Arg	Arg
		290				295					300				
Ser	Lys	Asn	Ser	Val	Glu	Gly	Asp	Ser	Thr	Ser	Asp	Ala	Glu	Gly	Asp
305					310					315					320
Ala	Gly	Pro	Ala	Gly	Gln	Asp	Lys	Ser	Glu	Val	Pro	Glu	Thr	Pro	Glu
			325						330					335	
Ile	Pro	Asn	Glu	Leu	Ser	Ser	Asn	Ile	Arg	Arg	Ile	Pro	Arg	Pro	Gly
			340				345						350		
Ser	Ala	Arg	Pro	Ala	Pro	Pro	Arg	Val	Lys	Arg	Gln	Asp	Ser	Met	Glu
		355					360					365			
Ala	Leu	Gln	Met	Asp	Arg	Ser	Gly	Ser	Gly	Lys	Thr	Val	Ser	Asn	Val
		370				375					380				
Ile	Thr	Glu	Ser	His	Asn	Ser	Asp	Asn	Glu	Glu	Asp	Asp	Gln	Phe	Val
385					390				395						400
Val	Glu	Ala	Ala	Pro	Gln	Leu	Ser	Glu	Met	Ser	Glu	Ile	Glu	Met	Val
			405						410					415	
Thr	Ala	Val	Glu	Leu	Glu	Glu	Glu	Glu	Lys	His	Gly	Gly	Leu	Val	Lys
			420					425					430		
Lys	Ile	Leu	Glu	Thr	Lys	Lys	Asp	Tyr	Glu	Lys	Leu	Gln	Gln	Ser	Pro
		435					440				445				
Lys	Pro	Gly	Glu	Lys	Glu	Arg	Ser	Leu	Phe	Glu	Ser	Ala	Trp	Lys	Lys
		450				455					460				
Glu	Lys	Asp	Ile	Val	Ser	Lys	Glu	Ile	Glu	Lys	Leu	Arg	Thr	Ser	Ile
465					470					475					480
Gln	Thr	Leu	Cys	Lys	Ser	Ala	Leu	Pro	Leu	Gly	Lys	Ile	Met	Asp	Tyr
			485					490						495	
Ile	Gln	Glu	Asp	Val	Asp	Ala	Met	Gln	Asn	Glu	Leu	Gln	Met	Trp	His
			500					505					510		
Ser	Glu	Asn	Arg	Gln	His	Ala	Glu	Ala	Leu	Gln	Gln	Glu	Gln	Arg	Ile
		515					520					525			
Thr	Asp	Cys	Ala	Val	Glu	Pro	Leu	Lys	Ala	Glu	Leu	Ala	Glu	Leu	Glu
		530				535					540				

Gln Leu Ile Lys Asp Gln Gln Asp Lys Ile Cys Ala Val Lys Ala Asn
 545 550 555 560
 Ile Leu Lys Asn Glu Glu Lys Ile Gln Lys Met Val Tyr Ser Ile Asn
 565 570 575
 Leu Thr Ser Arg Arg *
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<210> 1821

<211> 1453

<212> PRT

<213> Homo sapiens

<400> 1821

Met Arg Thr Leu Gly Thr Cys Leu Ala Thr Leu Ala Gly Leu Leu Leu
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 Thr Ala Ala Gly Glu Thr Phe Ser Gly Gly Cys Leu Phe Asp Glu Pro
 20 25 30
 Tyr Ser Thr Cys Gly Tyr Ser Gln Ser Glu Gly Asp Asp Phe Asn Trp
 35 40 45
 Glu Gln Val Asn Thr Leu Thr Lys Pro Thr Ser Asp Pro Trp Met Pro
 50 55 60
 Ser Gly Ser Phe Met Leu Val Asn Ala Ser Gly Arg Pro Glu Gly Gln
 65 70 75 80
 Arg Ala His Leu Leu Leu Pro Gln Leu Lys Glu Asn Asp Thr His Cys
 85 90 95
 Ile Asp Phe His Tyr Phe Val Ser Ser Lys Ser Asn Ser Pro Pro Gly
 100 105 110
 Leu Leu Asn Val Tyr Val Lys Val Asn Asn Gly Pro Leu Gly Asn Pro
 115 120 125
 Ile Trp Asn Ile Ser Gly Asp Pro Thr Arg Thr Trp Asn Arg Ala Glu
 130 135 140
 Leu Ala Ile Ser Thr Phe Trp Pro Asn Phe Tyr Gln Val Ile Phe Glu
 145 150 155 160
 Val Ile Thr Ser Gly His Gln Gly Tyr Leu Ala Ile Asp Glu Val Lys
 165 170 175
 Val Leu Gly His Pro Cys Thr Arg Thr Pro His Phe Leu Arg Ile Gln
 180 185 190
 Asn Val Glu Val Asn Ala Gly Gln Phe Ala Thr Phe Gln Cys Ser Ala
 195 200 205
 Ile Gly Arg Thr Val Ala Gly Asp Arg Leu Trp Leu Gln Gly Ile Asp
 210 215 220
 Val Arg Asp Ala Pro Leu Lys Glu Ile Lys Val Thr Ser Ser Arg Arg
 225 230 235 240
 Phe Ile Ala Ser Phe Asn Val Val Asn Thr Thr Lys Arg Asp Ala Gly
 245 250 255
 Lys Tyr Arg Cys Met Ile Arg Thr Glu Gly Gly Val Gly Ile Ser Asn
 260 265 270
 Tyr Ala Glu Leu Val Val Lys Glu Pro Pro Val Pro Ile Ala Pro Pro
 275 280 285
 Gln Leu Ala Ser Val Gly Ala Thr Tyr Leu Trp Ile Gln Leu Asn Ala
 290 295 300
 Asn Ser Ile Asn Gly Asp Gly Pro Ile Val Ala Arg Glu Val Glu Tyr
 305 310 315 320
 Cys Thr Ala Ser Gly Ser Trp Asn Asp Arg Gln Pro Val Asp Ser Thr
 325 330 335
 Ser Tyr Lys Ile Gly His Leu Asp Pro Asp Thr Glu Tyr Glu Ile Ser
 340 345 350
 Val Leu Leu Thr Arg Pro Gly Glu Gly Gly Thr Gly Ser Pro Gly Pro
 355 360 365
 Ala Leu Arg Thr Arg Thr Lys Cys Ala Asp Pro Met Arg Gly Pro Arg
 370 375 380

Lys	Leu	Glu	Val	Val	Glu	Val	Lys	Ser	Arg	Gln	Ile	Thr	Ile	Arg	Trp
385					390					395					400
Glu	Pro	Phe	Gly	Tyr	Asn	Val	Thr	Arg	Cys	His	Ser	Tyr	Asn	Leu	Thr
				405					410					415	
Val	His	Tyr	Cys	Tyr	Gln	Val	Gly	Gly	Gln	Glu	Gln	Val	Arg	Glu	Glu
			420					425					430		
Val	Ser	Trp	Asp	Thr	Glu	Asn	Ser	His	Pro	Gln	His	Thr	Ile	Thr	Asn
		435					440					445			
Leu	Ser	Pro	Tyr	Thr	Asn	Val	Ser	Val	Lys	Leu	Ile	Leu	Met	Asn	Pro
	450					455					460				
Glu	Gly	Arg	Lys	Glu	Ser	Gln	Glu	Leu	Ile	Val	Gln	Thr	Asp	Glu	Asp
465					470					475					480
Leu	Pro	Gly	Ala	Val	Pro	Thr	Glu	Ser	Ile	Gln	Gly	Ser	Thr	Phe	Glu
				485					490					495	
Glu	Lys	Ile	Phe	Leu	Gln	Trp	Arg	Glu	Pro	Thr	Gln	Thr	Tyr	Gly	Val
			500					505					510		
Ile	Thr	Leu	Tyr	Glu	Ile	Thr	Tyr	Lys	Ala	Val	Ser	Ser	Phe	Asp	Pro
	515						520					525			
Glu	Ile	Asp	Leu	Ser	Asn	Gln	Ser	Gly	Arg	Val	Ser	Lys	Leu	Gly	Asn
	530					535					540				
Glu	Thr	His	Phe	Leu	Phe	Phe	Gly	Leu	Tyr	Pro	Gly	Thr	Thr	Tyr	Ser
545					550					555					560
Phe	Thr	Ile	Arg	Ala	Ser	Thr	Ala	Lys	Gly	Phe	Gly	Pro	Pro	Ala	Thr
				565					570					575	
Asn	Gln	Phe	Thr	Thr	Lys	Ile	Ser	Ala	Pro	Ser	Met	Pro	Ala	Tyr	Glu
			580					585					590		
Leu	Glu	Thr	Pro	Leu	Asn	Gln	Thr	Asp	Asn	Thr	Val	Thr	Val	Met	Leu
	595						600					605			
Lys	Pro	Ala	His	Ser	Arg	Gly	Ala	Pro	Val	Ser	Val	Tyr	Gln	Ile	Val
	610					615						620			
Val	Glu	Glu	Glu	Arg	Pro	Arg	Arg	Thr	Lys	Lys	Thr	Thr	Glu	Ile	Leu
625					630					635					640
Lys	Cys	Tyr	Pro	Val	Pro	Ile	His	Phe	Gln	Asn	Ala	Ser	Leu	Leu	Asn
				645					650					655	
Ser	Gln	Tyr	Tyr	Phe	Ala	Ala	Glu	Phe	Pro	Ala	Asp	Ser	Leu	Gln	Ala
			660					665					670		
Ala	Gln	Pro	Phe	Thr	Ile	Gly	Asp	Asn	Lys	Thr	Tyr	Asn	Gly	Tyr	Trp
	675					680						685			
Asn	Thr	Pro	Leu	Leu	Pro	Tyr	Lys	Ser	Tyr	Arg	Ile	Tyr	Phe	Gln	Ala
	690					695					700				
Ala	Ser	Arg	Ala	Asn	Gly	Glu	Thr	Lys	Ile	Asp	Cys	Val	Gln	Val	Ala
705					710					715					720
Thr	Lys	Gly	Ala	Ala	Thr	Pro	Lys	Pro	Val	Pro	Glu	Pro	Glu	Lys	Gln
				725					730					735	
Thr	Asp	His	Thr	Val	Lys	Ile	Ala	Gly	Val	Ile	Ala	Gly	Ile	Leu	Leu
			740					745					750		
Phe	Val	Ile	Ile	Phe	Leu	Gly	Val	Val	Leu	Val	Met	Lys	Lys	Arg	Lys
	755						760					765			
Leu	Ala	Lys	Lys	Arg	Lys	Glu	Thr	Met	Ser	Ser	Thr	Arg	Gln	Glu	Met
	770					775					780				
Thr	Val	Met	Val	Asn	Ser	Met	Asp	Lys	Ser	Tyr	Ala	Glu	Gln	Gly	Thr
785					790					795					800
Asn	Cys	Asp	Glu	Ala	Phe	Ser	Phe	Met	Asp	Thr	His	Asn	Leu	Asn	Gly
				805					810					815	
Arg	Ser	Val	Ser	Ser	Pro	Ser	Ser	Phe	Thr	Met	Lys	Thr	Asn	Thr	Leu
				820				825					830		
Ser	Thr	Ser	Val	Pro	Asn	Ser	Tyr	Tyr	Pro	Asp	Glu	Thr	His	Thr	Met
			835				840					845			
Ala	Ser	Asp	Thr	Ser	Ser	Leu	Val	Gln	Ser	His	Thr	Tyr	Lys	Lys	Arg
	850					855					860				
Glu	Pro	Ala	Asp	Val	Pro	Tyr	Gln	Thr	Gly	Gln	Leu	His	Pro	Ala	Ile
865					870					875					880
Arg	Val	Ala	Asp	Leu	Leu	Gln	His	Ile	Thr	Gln	Met	Lys	Cys	Ala	Glu
				885					890					895	

Gly Tyr Gly Phe Lys Glu Glu Tyr Glu Ser Phe Phe Glu Gly Gln Ser																	
			900					905					910				
Ala Pro Trp Asp Ser Ala Lys Lys Asp Glu Asn Arg Met Lys Asn Arg																	
		915					920					925					
Tyr Gly Asn Ile Ile Ala Tyr Asp His Ser Arg Val Arg Leu Gln Thr																	
	930					935					940						
Ile Glu Gly Asp Thr Asn Ser Asp Tyr Ile Asn Gly Asn Tyr Ile Asp																	
945					950				955								960
Gly Tyr His Arg Pro Asn His Tyr Ile Ala Thr Gln Gly Pro Met Gln																	
			965					970									975
Glu Thr Ile Tyr Asp Phe Trp Arg Met Val Trp His Glu Asn Thr Ala																	
	980							985									990
Ser Ile Ile Met Val Thr Asn Leu Val Glu Val Gly Arg Val Lys Cys																	
	995					1000						1005					
Cys Lys Tyr Trp Pro Asp Asp Thr Glu Ile Tyr Lys Asp Ile Lys Val																	
1010					1015				1020								
Thr Leu Ile Glu Thr Glu Leu Leu Ala Glu Tyr Val Ile Arg Thr Phe																	
1025				1030				1035									1040
Ala Val Glu Lys Arg Gly Val His Glu Ile Arg Glu Ile Arg Gln Phe																	
			1045					1050									1055
His Phe Thr Gly Trp Pro Asp His Gly Val Pro Tyr His Ala Thr Gly																	
	1060						1065										1070
Leu Leu Gly Phe Val Arg Gln Val Lys Ser Lys Ser Pro Pro Ser Ala																	
	1075					1080						1085					
Gly Pro Leu Val Val His Cys Ser Ala Gly Ala Gly Arg Thr Gly Cys																	
1090					1095				1100								
Phe Ile Val Ile Asp Ile Met Leu Asp Met Ala Glu Arg Glu Gly Val																	
1105				1110				1115									1120
Val Asp Ile Tyr Asn Cys Val Arg Glu Leu Arg Ser Arg Arg Val Asn																	
			1125					1130									1135
Met Val Gln Thr Glu Glu Gln Tyr Val Phe Ile His Asp Ala Ile Leu																	
	1140						1145										1150
Glu Ala Cys Leu Cys Gly Asp Thr Ser Val Pro Ala Ser Gln Val Arg																	
	1155					1160						1165					
Ser Leu Tyr Tyr Asp Met Asn Lys Leu Asp Pro Gln Thr Asn Ser Ser																	
	1170				1175							1180					
Gln Ile Lys Glu Glu Phe Arg Thr Leu Asn Met Val Thr Pro Thr Leu																	
1185				1190				1195									1200
Arg Val Glu Asp Cys Ser Ile Ala Leu Leu Pro Arg Asn His Glu Lys																	
			1205					1210									1215
Asn Arg Cys Met Asp Ile Leu Pro Pro Asp Arg Cys Leu Pro Phe Leu																	
	1220						1225										1230
Ile Thr Ile Asp Gly Glu Ser Ser Asn Tyr Ile Asn Ala Ala Leu Met																	
	1235					1240						1245					
Asp Ser Tyr Lys Gln Pro Ser Ala Phe Ile Val Thr Gln His Pro Leu																	
	1250					1255						1260					
Pro Asn Thr Val Lys Asp Phe Trp Arg Leu Val Leu Asp Tyr His Cys																	
1265				1270				1275									1280
Thr Ser Val Val Met Leu Asn Asp Val Asp Pro Ala Gln Leu Cys Pro																	
			1285					1290									1295
Gln Tyr Trp Pro Glu Asn Gly Val His Arg His Gly Pro Ile Gln Val																	
	1300						1305										1310
Glu Phe Val Ser Ala Asp Leu Glu Glu Asp Ile Ile Ser Arg Ile Phe																	
	1315					1320						1325					
Arg Ile Tyr Asn Ala Ala Arg Pro Gln Asp Gly Tyr Arg Met Val Gln																	
	1330					1335						1340					
Gln Phe Gln Phe Leu Gly Trp Pro Met Tyr Arg Asp Thr Pro Val Ser																	
1345				1350				1355									1360
Lys Arg Ser Phe Leu Lys Leu Ile Arg Gln Val Asp Lys Trp Gln Glu																	
			1365					1370									1375
Glu Tyr Asn Gly Gly Glu Gly Arg Thr Val Val His Cys Leu Asn Gly																	
	1380						1385										1390
Gly Gly Arg Ser Gly Thr Phe Cys Ala Ile Ser Ile Val Cys Glu Met																	
	1395						1400										1405

Leu Arg His Gln Arg Thr Val Asp Val Phe His Ala Val Lys Thr Leu
 1410 1415 1420
 Arg Asn Asn Lys Pro Asn Met Val Asp Leu Leu Asp Gln Tyr Lys Phe
 1425 1430 1435 1440
 Cys Tyr Glu Val Ala Leu Glu Tyr Leu Asn Ser Gly *
 1445 1450 1452

<210> 1822
 <211> 1873
 <212> PRT
 <213> Homo sapiens

<400> 1822
 Met Met Asn Glu Asp Ala Ala Gln Lys Ser Asp Ser Gly Glu Lys Phe
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 Asn Gly Ser Ser Gln Arg Arg Lys Arg Pro Lys Lys Ser Asp Ser Asn
 20 25 30
 Ala Ser Phe Leu Arg Ala Ala Arg Ala Gly Asn Leu Asp Lys Val Val
 35 40 45
 Glu Tyr Leu Lys Gly Gly Ile Asp Ile Asn Thr Cys Asn Gln Asn Gly
 50 55 60
 Leu Asn Ala Leu His Leu Ala Ala Lys Glu Gly His Val Gly Leu Val
 65 70 75 80
 Gln Glu Leu Leu Gly Arg Gly Ser Ser Val Asp Ser Ala Thr Lys Lys
 85 90 95
 Gly Asn Thr Ala Leu His Ile Ala Ser Leu Ala Gly Gln Ala Glu Val
 100 105 110
 Val Lys Val Leu Val Lys Glu Gly Ala Asn Ile Asn Ala Gln Ser Gln
 115 120 125
 Asn Gly Phe Thr Pro Leu Tyr Met Ala Ala Gln Glu Asn His Ile Asp
 130 135 140
 Val Val Lys Tyr Leu Leu Glu Asn Gly Ala Asn Gln Ser Thr Ala Thr
 145 150 155 160
 Glu Asp Gly Phe Thr Pro Leu Ala Val Ala Leu Gln Gln Gly His Asn
 165 170 175
 Gln Ala Val Ala Ile Leu Leu Glu Asn Asp Thr Lys Gly Lys Val Arg
 180 185 190
 Leu Pro Ala Leu His Ile Ala Ala Arg Lys Asp Asp Thr Lys Ser Ala
 195 200 205
 Ala Leu Leu Leu Gln Asn Asp His Asn Ala Asp Val Gln Ser Lys Met
 210 215 220
 Met Val Asn Arg Thr Thr Glu Ser Gly Phe Thr Pro Leu His Ile Ala
 225 230 235 240
 Ala His Tyr Gly Asn Val Asn Val Ala Thr Leu Leu Leu Asn Arg Gly
 245 250 255
 Ala Ala Val Asp Phe Thr Ala Arg Asn Gly Ile Thr Pro Leu His Val
 260 265 270
 Ala Ser Lys Arg Gly Asn Thr Asn Met Val Lys Leu Leu Leu Asp Arg
 275 280 285
 Gly Gly Gln Ile Asp Ala Lys Thr Arg Asp Gly Leu Thr Pro Leu His
 290 295 300
 Cys Ala Ala Arg Ser Gly His Asp Gln Val Val Glu Leu Leu Leu Glu
 305 310 315 320
 Arg Gly Ala Pro Leu Leu Ala Arg Thr Lys Asn Gly Leu Ser Pro Leu
 325 330 335
 His Met Ala Ala Gln Gly Asp His Val Glu Cys Val Lys His Leu Leu
 340 345 350
 Gln His Lys Ala Pro Val Asp Asp Val Thr Leu Asp Tyr Leu Thr Ala
 355 360 365
 Leu His Val Ala Ala His Cys Gly His Tyr Arg Val Thr Lys Leu Leu
 370 375 380

Leu	Asp	Lys	Arg	Ala	Asn	Pro	Asn	Ala	Arg	Ala	Leu	Asn	Gly	Phe	Thr
385					390					395					400
Pro	Leu	His	Ile	Ala	Cys	Lys	Lys	Asn	Arg	Ile	Lys	Val	Met	Glu	Leu
				405					410					415	
Leu	Val	Lys	Tyr	Gly	Ala	Ser	Ile	Gln	Ala	Ile	Thr	Glu	Ser	Gly	Leu
			420					425					430		
Thr	Pro	Ile	His	Val	Ala	Ala	Phe	Met	Gly	His	Leu	Asn	Ile	Val	Leu
		435					440					445			
Leu	Leu	Leu	Gln	Asn	Gly	Ala	Ser	Pro	Asp	Val	Thr	Asn	Ile	Arg	Gly
	450					455					460				
Glu	Thr	Ala	Leu	His	Met	Ala	Ala	Arg	Ala	Gly	Gln	Val	Glu	Val	Val
465					470					475					480
Arg	Cys	Leu	Leu	Arg	Asn	Gly	Ala	Leu	Val	Asp	Ala	Arg	Ala	Arg	Glu
				485					490					495	
Glu	Gln	Thr	Pro	Leu	His	Ile	Ala	Ser	Arg	Leu	Gly	Lys	Thr	Glu	Ile
			500					505					510		
Val	Gln	Leu	Leu	Leu	Gln	His	Met	Ala	His	Pro	Asp	Ala	Ala	Thr	Thr
	515						520					525			
Asn	Gly	Tyr	Thr	Pro	Leu	His	Ile	Ser	Ala	Arg	Glu	Gly	Gln	Val	Asp
	530					535					540				
Val	Ala	Ser	Val	Leu	Leu	Glu	Ala	Gly	Ala	Ala	His	Ser	Leu	Ala	Thr
545					550					555					560
Lys	Lys	Gly	Phe	Thr	Pro	Leu	His	Val	Ala	Ala	Lys	Tyr	Gly	Ser	Leu
				565					570					575	
Asp	Val	Ala	Lys	Leu	Leu	Leu	Gln	Arg	Arg	Ala	Ala	Ala	Asp	Ser	Ala
			580					585					590		
Gly	Lys	Asn	Gly	Leu	Thr	Pro	Leu	His	Val	Ala	Ala	His	Tyr	Asp	Asn
		595					600					605			
Gln	Lys	Val	Ala	Leu	Leu	Leu	Leu	Glu	Lys	Gly	Ala	Ser	Pro	His	Ala
	610					615					620				
Thr	Ala	Lys	Asn	Gly	Tyr	Thr	Pro	Leu	His	Ile	Ala	Ala	Lys	Lys	Asn
625					630					635					640
Gln	Met	Gln	Ile	Ala	Ser	Thr	Leu	Leu	Asn	Tyr	Gly	Ala	Glu	Thr	Asn
				645					650					655	
Ile	Val	Thr	Lys	Gln	Gly	Val	Thr	Pro	Leu	His	Leu	Ala	Ser	Gln	Glu
			660					665					670		
Gly	His	Thr	Asp	Met	Val	Thr	Leu	Leu	Leu	Asp	Lys	Gly	Ala	Asn	Ile
		675					680					685			
His	Met	Ser	Thr	Lys	Ser	Gly	Leu	Thr	Ser	Leu	His	Leu	Ala	Ala	Gln
	690					695					700				
Glu	Asp	Lys	Val	Asn	Val	Ala	Asp	Ile	Leu	Thr	Lys	His	Gly	Ala	Asp
705					710					715					720
Gln	Asp	Ala	His	Thr	Lys	Leu	Gly	Tyr	Thr	Pro	Leu	Ile	Val	Ala	Cys
				725					730					735	
His	Tyr	Gly	Asn	Val	Lys	Met	Val	Asn	Phe	Leu	Leu	Lys	Gln	Gly	Ala
			740					745					750		
Asn	Val	Asn	Ala	Lys	Thr	Lys	Asn	Gly	Tyr	Thr	Pro	Leu	His	Gln	Ala
		755					760					765			
Ala	Gln	Gln	Gly	His	Thr	His	Ile	Ile	Asn	Val	Leu	Leu	Gln	His	Gly
	770					775					780				
Ala	Lys	Pro	Asn	Ala	Thr	Thr	Ala	Asn	Gly	Asn	Thr	Ala	Leu	Ala	Ile
785					790					795					800
Ala	Lys	Arg	Leu	Gly	Tyr	Ile	Ser	Val	Val	Asp	Thr	Leu	Lys	Val	Val
				805					810					815	
Thr	Glu	Glu	Val	Thr	Thr	Thr	Thr	Thr	Thr	Ile	Thr	Glu	Lys	His	Lys
			820					825					830		
Leu	Asn	Val	Pro	Glu	Thr	Met	Thr	Glu	Val	Leu	Asp	Val	Ser	Asp	Glu
		835					840					845			
Glu	Gly	Asp	Asp	Thr	Met	Thr	Gly	Asp	Gly	Gly	Glu	Tyr	Leu	Arg	Pro
	850					855					860				
Glu	Asp	Leu	Lys	Glu	Leu	Gly	Asp	Asp	Ser	Leu	Pro	Ser	Ser	Gln	Phe
865					870					875					880
Leu	Asp	Gly	Met	Asn	Tyr	Leu	Arg	Tyr	Ser	Leu	Glu	Gly	Gly	Arg	Ser
				885					890					895	

Asp Ser Leu Arg Ser Phe Ser Ser Asp Arg Ser His Thr Leu Ser His																			
	900						905					910							
Ala Ser Tyr Leu Arg Asp Ser Ala Val Met Asp Asp Ser Val Val Ile																			
	915						920					925							
Pro Ser His Gln Val Ser Thr Leu Ala Lys Glu Ala Glu Arg Asn Ser																			
	930						935					940							
Tyr Arg Leu Ser Trp Gly Thr Glu Asn Leu Asp Asn Val Ala Leu Ser																			
	945						950					955							960
Ser Ser Pro Ile His Ser Gly Phe Leu Val Ser Phe Met Val Asp Ala																			
				965						970									975
Arg Gly Gly Ala Met Arg Gly Cys Arg His Asn Gly Leu Arg Ile Ile																			
			980						985										990
Ile Pro Pro Arg Lys Cys Thr Ala Pro Thr Arg Val Thr Cys Arg Leu																			
	995						1000												1005
Val Lys Arg His Arg Leu Ala Thr Met Pro Pro Met Val Glu Gly Glu																			
	1010						1015												1020
Gly Leu Ala Ser Arg Leu Ile Glu Val Gly Pro Ser Gly Ala Gln Phe																			
	1025						1030					1035							1040
Leu Gly Lys Leu His Leu Pro Thr Ala Pro Pro Pro Leu Asn Glu Gly																			
							1045					1050							1055
Glu Ser Leu Val Ser Arg Ile Leu Gln Leu Gly Pro Pro Gly Thr Lys																			
	1060																		1070
Phe Leu Gly Pro Val Ile Val Glu Ile Pro His Phe Ala Ala Leu Arg																			
	1075						1080												1085
Gly Lys Glu Arg Glu Leu Val Val Leu Arg Ser Glu Asn Gly Asp Ser																			
	1090						1095												1100
Trp Lys Glu His Phe Cys Asp Tyr Thr Glu Asp Glu Leu Asn Glu Ile																			
	1105						1110												1120
Leu Asn Gly Met Asp Glu Val Leu Asp Ser Pro Glu Asp Leu Glu Lys																			
							1125												1135
Lys Arg Ile Cys Arg Ile Ile Thr Arg Asp Phe Pro Gln Tyr Phe Ala																			
	1140																		1150
Val Val Ser Arg Ile Lys Gln Asp Ser Asn Leu Ile Gly Pro Glu Gly																			
	1155						1160												1165
Gly Val Leu Ser Ser Thr Val Val Pro Gln Val Gln Ala Val Phe Pro																			
	1170						1175												1180
Glu Gly Ala Leu Thr Lys Arg Ile Arg Val Gly Leu Gln Ala Gln Pro																			
	1185						1190												1200
Met His Ser Glu Leu Val Lys Lys Ile Leu Gly Asn Lys Ala Thr Phe																			
							1205												1215
Ser Pro Ile Val Thr Leu Glu Pro Arg Arg Arg Lys Phe His Lys Pro																			
	1220																		1230
Ile Thr Met Thr Ile Pro Val Pro Lys Ala Ser Ser Asp Val Met Leu																			
	1235						1240												1245
Asn Gly Phe Gly Gly Asp Ala Pro Thr Leu Arg Leu Leu Cys Ser Ile																			
	1250						1255												1260
Thr Gly Gly Thr Thr Pro Ala Gln Trp Glu Asp Ile Thr Gly Thr Thr																			
	1265						1270												1280
Pro Leu Thr Phe Val Asn Glu Cys Val Ser Phe Thr Thr Asn Val Ser																			
							1285												1295
Ala Arg Phe Trp Leu Ile Asp Cys Arg Gln Ile Gln Glu Ser Val Thr																			
	1300																		1310
Phe Ala Ser Gln Val Tyr Arg Glu Ile Ile Cys Val Pro Tyr Met Ala																			
	1315						1320												1325
Lys Phe Val Val Phe Ala Lys Ser His Asp Pro Ile Glu Ala Arg Leu																			
	1330						1335												1340
Arg Cys Phe Cys Met Thr Asp Asp Lys Val Asp Lys Thr Leu Glu Gln																			
	1345						1350												1360
Gln Glu Asn Phe Ala Glu Val Ala Arg Ser Arg Asp Val Glu Val Leu																			
							1365												1375
Glu Gly Lys Pro Ile Tyr Val Asp Cys Phe Gly Asn Leu Val Pro Leu																			
	1380																		1390
Thr Lys Ser Gly Gln His His Ile Phe Ser Phe Phe Ala Phe Lys Glu																			
	1395						1400												1405

Asn Arg Leu Pro Leu Phe Val Lys Val Arg Asp Thr Thr Gln Glu Pro
 1410 1415 1420
 Cys Gly Arg Leu Ser Phe Met Lys Glu Pro Lys Ser Thr Arg Gly Leu
 1425 1430 1435 1440
 Val His Gln Ala Ile Cys Asn Leu Asn Ile Thr Leu Pro Ile Tyr Thr
 1445 1450 1455
 Lys Glu Ser Glu Ser Asp Gln Glu Gln Glu Glu Ile Asp Met Thr
 1460 1465 1470
 Ser Glu Lys Asn Pro Gln Asp Glu Gln Glu Arg Ile Glu Glu Arg Leu
 1475 1480 1485
 Ala Tyr Ile Ala Asp His Leu Gly Phe Ser Trp Thr Glu Leu Ala Arg
 1490 1495 1500
 Glu Leu Asp Phe Thr Glu Glu Gln Ile His Gln Ile Arg Ile Glu Asn
 1505 1510 1515 1520
 Pro Asn Ser Leu Gln Asp Gln Ser His Ala Leu Leu Lys Tyr Trp Leu
 1525 1530 1535
 Glu Arg Asp Gly Lys His Ala Thr Asp Thr Asn Leu Val Glu Cys Leu
 1540 1545 1550
 Thr Lys Ile Asn Arg Met Asp Ile Val His Leu Met Glu Thr Asn Thr
 1555 1560 1565
 Glu Pro Leu Gln Glu Arg Ile Ser His Ser Tyr Ala Glu Ile Glu Gln
 1570 1575 1580
 Thr Ile Thr Leu Asp His Ser Glu Gly Phe Ser Val Leu Gln Glu Glu
 1585 1590 1595 1600
 Leu Cys Thr Ala Gln His Lys Gln Lys Glu Glu Gln Ala Val Ser Lys
 1605 1610 1615
 Glu Ser Glu Thr Cys Asp His Pro Pro Ile Val Ser Glu Glu Asp Ile
 1620 1625 1630
 Ser Val Gly Tyr Ser Thr Phe Gln Asp Gly Val Pro Lys Thr Glu Gly
 1635 1640 1645
 Asp Ser Ser Ser Thr Ala Leu Phe Pro Gln Thr His Lys Glu Gln Val
 1650 1655 1660
 Gln Gln Asp Phe Ser Gly Lys Met Gln Asp Leu Pro Glu Glu Ser Ser
 1665 1670 1675 1680
 Leu Glu Tyr Gln Gln Glu Tyr Phe Val Thr Thr Pro Gly Thr Glu Thr
 1685 1690 1695
 Ser Glu Thr Gln Lys Ala Met Ile Val Pro Ser Ser Pro Ser Lys Thr
 1700 1705 1710
 Pro Glu Glu Val Ser Thr Pro Ala Glu Glu Glu Lys Leu Tyr Leu Gln
 1715 1720 1725
 Thr Pro Thr Ser Ser Glu Arg Gly Gly Ser Pro Ile Ile Gln Glu Pro
 1730 1735 1740
 Glu Glu Pro Ser Glu His Arg Glu Glu Ser Ser Pro Arg Lys Thr Ser
 1745 1750 1755 1760
 Leu Val Ile Val Glu Ser Ala Asp Asn Gln Pro Glu Thr Cys Glu Arg
 1765 1770 1775
 Leu Asp Glu Asp Ala Ala Phe Glu Lys Gly Asp Asp Met Pro Glu Ile
 1780 1785 1790
 Pro Pro Glu Thr Val Thr Glu Glu Glu Tyr Ile Asp Glu His Gly His
 1795 1800 1805
 Thr Val Val Lys Lys Val Thr Arg Lys Ile Ile Arg Arg Tyr Val Ser
 1810 1815 1820
 Ser Glu Gly Thr Glu Lys Glu Glu Ile Met Val Gln Gly Met Pro Gln
 1825 1830 1835 1840
 Glu Pro Val Asn Ile Glu Glu Gly Asp Gly Tyr Ser Lys Val Ile Lys
 1845 1850 1855
 Arg Val Val Leu Lys Ser Asp Thr Glu Gln Ser Glu Asp Asn Asn Glu
 1860 1865 1870 1872

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<211> 2941
 <212> PRT
 <213> Homo sapiens

<400> 1823
 Met Gly Cys Ile Met Thr Glu Ala Leu Glu Asn Lys Ser Val His Phe
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 Gln Glu Asn Pro Ser Cys Leu Leu Cys Asn Ile Leu His His Tyr Leu
 35 40 45
 His Gln Ala Asn Tyr Ser Ile Ile Asp Asp Ala Thr Met Ser Asp Gly
 50 55 60
 Leu Pro Ala Leu Val Thr Leu Lys Lys Gly Leu Val Ala Leu Ala Arg
 65 70 75 80
 Gln Trp Met Lys Phe Ile Val Val Thr Pro Ala Phe Lys Gly Val Ser
 85 90 95
 Leu His Arg Pro Ala Gln Pro Leu Lys Pro Gln Ile Ala Met Asp His
 100 105 110
 Glu His Glu Asp Gly Leu Gly Leu Asp Asn Gly Gly Gly Leu Gln Ser
 115 120 125
 Asp Thr Ser Ala Asp Gly Ala Glu Phe Glu Phe Asp Ala Ala Thr Val
 130 135 140
 Ser Glu His Thr Met Leu Leu Glu Gly Thr Ala Asn Arg Pro Pro Pro
 145 150 155 160
 Gly Ser Ser Gly Pro Val Thr Gly Ala Glu Ile Met Arg Lys Leu Ser
 165 170 175
 Lys Thr His Thr His Ser Asp Ser Ala Leu Lys Ile Lys Gly Ile His
 180 185 190
 Pro Tyr His Ser Leu Ser Tyr Thr Ser Gly Asp Thr Ala Thr Asp Ser
 195 200 205
 Pro Val His Val Gly Arg Ala Gly Met Pro Val Lys Asp Ser Pro Arg
 210 215 220
 Lys Glu Ser Leu Leu Ser Tyr Leu Thr Gly Ser Phe Pro Ser Leu His
 225 230 235 240
 Asn Leu Leu Glu Gly Thr Pro Gln Arg Ser Ser Ala Ala Val Lys Ser
 245 250 255
 Ser Ser Leu Thr Arg Thr Gly Asn Thr Val Ala Thr Asp Met Leu Ser
 260 265 270
 Glu His Pro Leu Leu Ser Glu Pro Ser Ser Val Ser Phe Tyr Asn Trp
 275 280 285
 Met Ser Asn Ala Val Gly Asn Arg Gly Ser Val Leu Gln Glu Ser Pro
 290 295 300
 Val Thr Lys Ser Gly His Asn Ser Leu Pro Thr Gly Val Ala Pro Asn
 305 310 315 320
 Leu Pro Thr Ile Pro Ser Ala Ser Asp Phe Asn Thr Val Leu Ser Ser
 325 330 335
 Asp Gln Asn Thr Leu Asp Gly Thr His Ser Gln His Ser Thr Ser Gln
 340 345 350
 Asp Asp Val Ala Gly Val Glu Glu Ala Asn Gln Gly Phe Pro Ala Val
 355 360 365
 Gln Leu Ala Asp Ala Gln Val Val Phe Lys Pro Leu Leu Ser His Thr
 370 375 380
 Gly Ile Gln Ser Gln Asp Thr Met Pro Phe Cys Tyr Arg Met Tyr Phe
 385 390 395 400
 Gly Glu His Leu Ser Phe Ser Gly Thr Leu Asp Cys Leu Arg Ala Asp
 405 410 415
 Ile Val Asp Ser Asp Thr Ala Lys Glu Arg Lys Gly Lys Arg Ala Arg
 420 425 430
 Arg Gln Gly His Val Asn Leu Pro Pro Leu Glu Phe Lys Pro Ala Leu
 435 440 445
 Met Leu Gly Thr Phe Ser Ile Ser Ala Val Val Met Glu Lys Ser Val
 450 455 460

Cys	Thr	Pro	Gln	Asn	Ser	Thr	Ser	Ala	Leu	Ser	Phe	His	Asp	Leu	Ser
465					470					475					480
Lys	Arg	Tyr	Tyr	Asn	Thr	Phe	His	Cys	Asn	Phe	Thr	Ile	Ser	Cys	Gln
				485					490					495	
Ser	Ile	Ser	Gln	His	Val	Asp	Met	Ala	Leu	Val	Arg	Leu	Ile	His	Gln
			500					505					510		
Phe	Ser	Thr	Met	Ile	Asp	Asp	Ile	Lys	Ala	Thr	Gln	Thr	Asp	Ile	Lys
		515					520					525			
Leu	Ser	Arg	Tyr	Thr	Ala	Gly	Ser	Ala	Ser	Pro	Thr	Pro	Thr	Phe	Lys
	530					535					540				
Thr	Arg	Lys	His	Arg	Asp	Phe	Arg	Ser	Ser	Asp	Phe	Ser	Arg	Ser	Ser
545					550					555					560
Arg	Gly	Ser	Leu	Asn	Gly	Gly	Asn	Arg	Val	Asn	Asn	Ala	Lys	Asn	Lys
				565					570					575	
Arg	Thr	Asn	Asn	Glu	Asn	Asn	Lys	Lys	Glu	Ser	Arg	Asn	Lys	Asn	Ser
		580						585					590		
Leu	Gly	Arg	Ser	Glu	Arg	Arg	Thr	Ser	Lys	Val	Ser	Arg	Lys	Gly	Ser
	595						600					605			
Lys	Asp	Val	Val	Asp	His	Met	Thr	Ile	His	Met	Asp	Asp	Ser	Asp	Ser
	610					615					620				
Ile	Thr	Val	Ser	Glu	Gln	Ser	Glu	Pro	Ser	Ala	Glu	Cys	Trp	Gln	Asn
625					630					635					640
Met	Tyr	Lys	Leu	Leu	Asn	Phe	Tyr	Ser	Leu	Ile	Ser	Asp	Pro	Thr	Gly
			645						650					655	
Ile	Leu	Glu	Lys	Ser	Ser	Glu	Thr	Phe	Gly	Pro	Ala	Gly	Val	Arg	Ser
		660						665					670		
Pro	Thr	Glu	Pro	Thr	Cys	Lys	Val	Val	Phe	Glu	Asn	Glu	Gln	Asp	Asn
	675						680					685			
Ser	Ser	Leu	Thr	Lys	Thr	Gln	Arg	Lys	Arg	Ser	Leu	Val	Thr	Ser	Glu
	690					695					700				
Pro	Gln	His	Val	Thr	Leu	Ile	Val	Phe	Gly	Ile	Gly	Met	Val	Asn	Arg
705					710				715						720
Thr	His	Leu	Glu	Ala	Asp	Ile	Gly	Gly	Leu	Thr	Met	Glu	Ser	Glu	Leu
			725					730						735	
Lys	Arg	Ile	His	Gly	Ser	Phe	Thr	Leu	Lys	Glu	Lys	Met	Lys	Asp	Val
		740						745					750		
Leu	His	Gln	Lys	Met	Thr	Glu	Thr	Cys	Ala	Thr	Ala	His	Ile	Gly	Gly
	755						760					765			
Val	Asn	Ile	Val	Leu	Leu	Glu	Gly	Ile	Thr	Pro	Asn	Ile	Gln	Leu	Glu
	770					775					780				
Asp	Phe	Pro	Thr	Ser	Pro	Thr	Ser	Thr	Ala	Lys	Gln	Glu	Phe	Leu	Thr
785					790					795					800
Val	Val	Lys	Cys	Ser	Ile	Ala	Lys	Ser	Gln	Ala	Leu	Tyr	Ser	Ala	Gln
			805						810					815	
Arg	Gly	Leu	Lys	Thr	Asn	Asn	Ala	Ala	Val	Phe	Lys	Val	Gly	Ala	Ile
		820						825					830		
Ser	Ile	Asn	Ile	Pro	Gln	His	Pro	Ala	Thr	Leu	His	Ser	Met	Met	Val
	835						840					845			
Arg	Ser	Ser	His	Gln	Leu	Ser	Lys	Gln	Ile	Ser	Asp	Leu	Ile	Arg	Gln
	850					855					860				
Pro	Ser	Thr	Ala	Pro	Gln	Pro	Val	Lys	Glu	Asp	Ile	Ala	Thr	Pro	Leu
865					870					875					880
Pro	Ser	Glu	Lys	Thr	Pro	Thr	Ser	Val	Asn	Gln	Thr	Pro	Val	Glu	Thr
			885						890					895	
Asn	Glu	Phe	Pro	Gln	Leu	Pro	Glu	Gly	Leu	Glu	Lys	Lys	Pro	Ile	Val
		900						905					910		
Leu	Lys	Phe	Ser	Ala	Met	Leu	Asp	Gly	Ile	Ala	Ile	Gly	Ala	Ala	Leu
	915						920					925			
Leu	Pro	Ser	Leu	Lys	Ala	Glu	Tyr	Lys	Met	Gly	Arg	Met	Arg	Ser	His
	930					935					940				
Gly	Met	Thr	Gly	Ala	Gln	Thr	Arg	Phe	Thr	Phe	Glu	Leu	Pro	Asn	His
945					950					955					960
Arg	Leu	Arg	Phe	Thr	Ser	Lys	Val	Ser	Ala	Thr	Asp	Met	Ser	Thr	Ile
			965						970					975	

Pro Pro Ser Ala Ser Leu Asn Leu Pro Pro Val Thr Met Ser Gly Lys
 980 985 990
 Tyr Ile Met Glu Glu His Asp Ser Tyr Ser Asp Gln Val Trp Ser Ile
 995 1000 1005
 Asp Glu Leu Pro Ser Lys Gln Gly Tyr Tyr Leu Gln Gly Asn Tyr Leu
 1010 1015 1020
 Arg Cys Val Ala Glu Val Gly Ser Phe Glu His Asn Leu Thr Thr Asp
 1025 1030 1035 1040
 Leu Leu Asn His Leu Val Phe Val Gln Lys Val Phe Met Lys Glu Val
 1045 1050 1055
 Asn Glu Val Ile Gln Lys Val Ser Gly Gly Glu Gln Pro Ile Pro Leu
 1060 1065 1070
 Trp Asn Glu His Asp Gly Thr Ala Asp Gly Asp Lys Pro Lys Ile Leu
 1075 1080 1085
 Leu Tyr Ser Leu Asn Leu Gln Phe Lys Gly Ile Gln Val Thr Ala Thr
 1090 1095 1100
 Thr Pro Ser Met Arg Ala Val Arg Phe Glu Thr Gly Leu Ile Glu Leu
 1105 1110 1115 1120
 Glu Leu Ser Asn Arg Leu Gln Thr Lys Ala Ser Pro Gly Ser Ser Ser
 1125 1130 1135
 Tyr Leu Lys Leu Phe Gly Lys Cys Gln Val Asp Leu Asn Leu Ala Leu
 1140 1145 1150
 Gly Gln Ile Val Lys His Gln Val Tyr Glu Glu Ala Gly Ser Asp Phe
 1155 1160 1165
 His Gln Val Ala Tyr Phe Lys Thr Arg Ile Gly Leu Arg Asn Ala Leu
 1170 1175 1180
 Arg Glu Glu Ile Ser Gly Ser Ser Asp Arg Glu Ala Val Leu Ile Thr
 1185 1190 1195 1200
 Leu Asn Arg Pro Ile Val Tyr Ala Gln Pro Val Ala Phe Asp Arg Ala
 1205 1210 1215
 Val Leu Phe Trp Leu Asn Tyr Lys Ala Ala Tyr Asp Asn Trp Asn Glu
 1220 1225 1230
 Gln Arg Met Ala Leu His Lys Asp Ile His Met Ala Thr Lys Glu Val
 1235 1240 1245
 Val Asp Met Leu Pro Gly Ile Gln Gln Thr Ser Ala Gln Ala Phe Gly
 1250 1255 1260
 Thr Leu Phe Leu Gln Leu Thr Val Asn Asp Leu Gly Ile Cys Leu Pro
 1265 1270 1275 1280
 Ile Thr Asn Thr Ala Gln Ser Asn His Thr Gly Asp Leu Asp Thr Gly
 1285 1290 1295
 Ser Ala Leu Val Leu Thr Ile Glu Ser Thr Leu Ile Thr Ala Cys Ser
 1300 1305 1310
 Ser Glu Ser Leu Val Ser Lys Gly His Phe Lys Asn Phe Cys Ile Arg
 1315 1320 1325
 Phe Ala Asp Gly Phe Glu Thr Ser Trp Asp Asp Trp Lys Pro Glu Ile
 1330 1335 1340
 His Gly Asp Leu Val Met Asn Ala Cys Val Val Pro Asp Gly Thr Tyr
 1345 1350 1355 1360
 Glu Val Cys Ser Arg Thr Thr Gly Gln Ala Ala Ala Glu Ser Ser Ser
 1365 1370 1375
 Ala Gly Thr Trp Thr Leu Asn Val Leu Trp Lys Met Cys Gly Ile Asp
 1380 1385 1390
 Val His Met Asp Pro Asn Ile Gly Lys Arg Leu Asn Ala Leu Gly Asn
 1395 1400 1405
 Thr Leu Thr Thr Leu Thr Gly Glu Glu Asp Ile Asp Asp Ile Ala Asp
 1410 1415 1420
 Leu Asn Ser Val Asn Ile Ala Asp Leu Ser Asp Glu Asp Glu Val Asp
 1425 1430 1435 1440
 Thr Met Ser Pro Thr Ile His Thr Glu Ala Thr Asp Tyr Arg Arg Gln
 1445 1450 1455
 Ala Ala Ser Ala Ser Gln Pro Gly Glu Leu Arg Gly Arg Lys Ile Met
 1460 1465 1470
 Lys Arg Ile Val Asp Ile Arg Glu Leu Asn Glu Gln Ala Lys Val Ile
 1475 1480 1485

Asp Asp Leu Lys Lys Leu Gly Ala Ser Glu Gly Thr Ile Asn Gln Glu
1490 1495 1500
Ile Gln Arg Tyr Gln Gln Leu Glu Ser Val Ala Val Asn Asp Ile Arg
1505 1510 1515 1520
Arg Asp Val Arg Lys Lys Leu Arg Arg Ser Ser Met Arg Ala Ala Ser
1525 1530 1535
Leu Lys Asp Lys Trp Gly Leu Ser Tyr Lys Pro Ser Tyr Ser Arg Ser
1540 1545 1550
Lys Ser Ile Ser Ala Ser Gly Arg Pro Pro Leu Lys Arg Met Glu Arg
1555 1560 1565
Ala Ser Ser Arg Val Gly Glu Thr Glu Glu Leu Pro Glu Ile Arg Val
1570 1575 1580
Asp Ala Ala Ser Pro Gly Pro Arg Val Thr Phe Asn Ile Gln Asp Thr
1585 1590 1595 1600
Phe Pro Glu Glu Thr Glu Leu Asp Leu Leu Ser Val Thr Ile Glu Gly
1605 1610 1615
Pro Ser His Tyr Ser Ser Asn Ser Glu Gly Ser Cys Ser Val Phe Ser
1620 1625 1630
Ser Pro Lys Thr Pro Gly Gly Phe Ser Pro Gly Ile Pro Phe Gln Thr
1635 1640 1645
Glu Glu Gly Arg Arg Asp Asp Ser Leu Ser Ser Thr Ser Glu Asp Ser
1650 1655 1660
Glu Lys Asp Glu Lys Asp Glu Asp His Glu Arg Glu Arg Phe Tyr Ile
1665 1670 1675 1680
Tyr Arg Lys Pro Ser His Thr Ser Arg Lys Lys Ala Thr Gly Phe Ala
1685 1690 1695
Ala Val His Gln Leu Phe Thr Glu Arg Trp Pro Thr Thr Pro Val Asn
1700 1705 1710
Arg Ser Leu Ser Gly Thr Ala Thr Glu Arg Asn Ile Asp Phe Glu Leu
1715 1720 1725
Asp Ile Arg Val Glu Ile Asp Ser Gly Lys Cys Val Leu His Pro Thr
1730 1735 1740
Thr Leu Leu Gln Glu His Asp Asp Ile Ser Leu Arg Arg Ser Tyr Asp
1745 1750 1755 1760
Arg Ser Ser Arg Ser Leu Asp Gln Asp Ser Pro Ser Lys Lys Lys Lys
1765 1770 1775
Phe Gln Thr Asn Tyr Ala Ser Thr Thr His Leu Met Thr Gly Lys Lys
1780 1785 1790
Val Pro Ser Ser Leu Gln Thr Lys Pro Ser Asp Leu Glu Thr Thr Val
1795 1800 1805
Phe Tyr Ile Pro Gly Val Asp Val Lys Leu His Tyr Asn Ser Lys Thr
1810 1815 1820
Leu Lys Thr Glu Ser Pro Asn Ala Ser Arg Gly Ser Ser Leu Pro Arg
1825 1830 1835 1840
Thr Leu Ser Lys Glu Ser Lys Leu Tyr Gly Met Lys Asp Ser Ala Thr
1845 1850 1855
Ser Pro Pro Ser Pro Pro Leu Pro Ser Thr Val Gln Ser Lys Thr Asn
1860 1865 1870
Thr Leu Leu Pro Pro Gln Pro Pro Pro Ile Pro Ala Ala Lys Gly Lys
1875 1880 1885
Gly Ser Gly Gly Val Lys Thr Ala Lys Leu Tyr Ala Trp Val Ala Leu
1890 1895 1900
Gln Ser Leu Pro Glu Glu Met Val Ile Ser Pro Cys Leu Leu Asp Phe
1905 1910 1915 1920
Leu Glu Lys Ala Leu Glu Thr Ile Pro Ile Thr Pro Val Glu Arg Asn
1925 1930 1935
Tyr Thr Ala Val Ser Ser Gln Asp Glu Asp Met Gly His Phe Glu Ile
1940 1945 1950
Pro Asp Pro Met Glu Glu Ser Thr Thr Ser Leu Val Ser Ser Ser Thr
1955 1960 1965
Ser Ala Tyr Ser Ser Phe Pro Val Asp Val Val Val Tyr Val Arg Val
1970 1975 1980
Gln Pro Ser Gln Ile Lys Phe Ser Cys Leu Pro Val Ser Arg Val Glu
1985 1990 1995 2000

Cys Met Leu Lys Leu Pro Ser Leu Asp Leu Val Phe Ser Ser Asn Arg
 2005 2010 2015
 Gly Glu Leu Glu Thr Leu Gly Thr Thr Tyr Pro Ala Glu Thr Leu Ser
 2020 2025 2030
 Pro Gly Gly Asn Ala Thr Gln Ser Gly Thr Lys Thr Ser Ala Ser Lys
 2035 2040 2045
 Thr Gly Ile Pro Gly Ser Ser Gly Leu Gly Ser Pro Leu Gly Arg Ser
 2050 2055 2060
 Arg His Ser Ser Ser Gln Ser Asp Leu Thr Ser Ser Ser Ser Ser Ser
 2065 2070 2075 2080
 Ser Gly Leu Ser Phe Thr Ala Cys Met Ser Asp Phe Ser Leu Tyr Val
 2085 2090 2095
 Phe His Pro Tyr Gly Ala Gly Lys Gln Lys Thr Ala Val Ser Gly Leu
 2100 2105 2110
 Thr Pro Gly Ser Gly Gly Leu Gly Asn Val Asp Glu Glu Pro Thr Ser
 2115 2120 2125
 Val Thr Gly Arg Lys Asp Ser Leu Ser Ile Asn Leu Glu Phe Val Lys
 2130 2135 2140
 Val Ser Leu Ser Arg Ile Arg Arg Ser Gly Gly Ala Ser Phe Phe Glu
 2145 2150 2155 2160
 Ser Gln Ser Val Ser Lys Ser Ala Ser Lys Met Asp Thr Thr Leu Ile
 2165 2170 2175
 Asn Ile Ser Ala Val Cys Asp Ile Gly Ser Ala Ser Phe Lys Tyr Asp
 2180 2185 2190
 Met Arg Arg Leu Ser Glu Ile Leu Ala Phe Pro Arg Ala Trp Tyr Arg
 2195 2200 2205
 Arg Ser Ile Ala Arg Arg Leu Phe Leu Gly Asp Gln Thr Ile Asn Leu
 2210 2215 2220
 Pro Thr Ser Gly Pro Gly Thr Pro Asp Ser Ile Glu Gly Val Ser Gln
 2225 2230 2235 2240
 His Leu Ser Pro Glu Ser Ser Arg Lys Ala Tyr Cys Lys Thr Trp Glu
 2245 2250 2255
 Gln Pro Ser Gln Ser Ala Ser Phe Thr His Met Pro Gln Ser Pro Asn
 2260 2265 2270
 Val Phe Asn Glu His Met Thr Asn Ser Thr Met Ser Pro Gly Thr Val
 2275 2280 2285
 Gly Gln Ser Leu Lys Ser Pro Ala Ser Ile Arg Ser Arg Ser Val Ser
 2290 2295 2300
 Asp Ser Ser Val Pro Arg Arg Asp Ser Leu Ser Lys Thr Ser Thr Pro
 2305 2310 2315 2320
 Phe Asn Lys Ser Asn Lys Ala Ala Ser Gln Gln Gly Thr Pro Trp Glu
 2325 2330 2335
 Thr Leu Val Val Phe Ala Ile Asn Leu Lys Gln Leu Asn Val Gln Met
 2340 2345 2350
 Asn Met Ser Asn Val Met Gly Asn Thr Thr Trp Thr Thr Ser Gly Leu
 2355 2360 2365
 Lys Ser Gln Gly Arg Leu Ser Val Gly Ser Asn Arg Asp Arg Glu Ile
 2370 2375 2380
 Ser Met Ser Val Gly Leu Gly Arg Ser Gln Leu Asp Ser Lys Gly Gly
 2385 2390 2395 2400
 Val Val Gly Gly Thr Ile Asp Val Asn Ala Leu Glu Met Val Ala His
 2405 2410 2415
 Ile Ser Glu His Pro Asn Gln Gln Pro Ser His Lys Ile Gln Ile Thr
 2420 2425 2430
 Met Gly Ser Thr Glu Ala Arg Val Asp Tyr Met Gly Ser Ser Ile Leu
 2435 2440 2445
 Met Gly Ile Phe Ser Asn Ala Asp Leu Lys Leu Gln Asp Glu Trp Lys
 2450 2455 2460
 Val Asn Leu Tyr Asn Thr Leu Asp Ser Ser Ile Thr Asp Lys Ser Glu
 2465 2470 2475 2480
 Ile Phe Val His Gly Asp Leu Lys Trp Asp Ile Phe Gln Val Met Ile
 2485 2490 2495
 Ser Arg Ser Thr Thr Pro Asp Leu Ile Lys Ile Gly Met Lys Leu Gln
 2500 2505 2510

Glu Phe Phe Thr Gln Gln Phe Asp Thr Ser Lys Arg Ala Leu Ser Thr
 2515 2520 2525
 Trp Gly Pro Val Pro Tyr Leu Pro Pro Lys Thr Met Thr Ser Asn Leu
 2530 2535 2540
 Glu Lys Ser Ser Gln Glu Gln Leu Leu Asp Ala Ala His His Arg His
 2545 2550 2555 2560
 Trp Pro Gly Val Leu Lys Val Val Ser Gly Cys His Ile Ser Leu Phe
 2565 2570 2575
 Gln Ile Pro Leu Pro Glu Asp Gly Met Gln Phe Gly Gly Ser Met Ser
 2580 2585 2590
 Leu His Gly Asn His Met Thr Leu Ala Cys Phe His Gly Pro Asn Phe
 2595 2600 2605
 Arg Ser Lys Ser Trp Ala Leu Phe His Leu Glu Glu Pro Asn Ile Ala
 2610 2615 2620
 Phe Trp Thr Glu Ala Gln Lys Ile Trp Glu Asp Gly Ser Ser Asp His
 2625 2630 2635 2640
 Ser Thr Tyr Ile Val Gln Thr Leu Asp Phe His Leu Gly His Asn Thr
 2645 2650 2655
 Met Val Thr Lys Pro Cys Gly Ala Leu Glu Ser Pro Met Ala Thr Ile
 2660 2665 2670
 Thr Lys Ile Thr Arg Arg Arg His Glu Asn Pro Pro His Gly Val Ala
 2675 2680 2685
 Ser Val Lys Glu Trp Phe Asn Tyr Val Thr Ala Thr Arg Asn Glu Glu
 2690 2695 2700
 Leu Asn Leu Leu Arg Asn Val Asp Ala Asn Asn Thr Glu Asn Ser Thr
 2705 2710 2715 2720
 Thr Val Lys Asn Ser Ser Leu Leu Ser Gly Phe Arg Gly Gly Ser Ser
 2725 2730 2735
 Tyr Asn His Glu Thr Glu Thr Ile Phe Ala Leu Pro Arg Met Gln Leu
 2740 2745 2750
 Asp Phe Lys Ser Ile His Val Gln Glu Pro Gln Glu Pro Ser Leu Gln
 2755 2760 2765
 Asp Ala Ser Leu Lys Pro Lys Val Glu Cys Ser Val Val Thr Glu Phe
 2770 2775 2780
 Thr Asp His Ile Cys Val Thr Met Asp Ala Glu Leu Ile Met Phe Leu
 2785 2790 2795 2800
 His Asp Leu Val Ser Ala Tyr Leu Lys Glu Lys Glu Lys Ala Ile Phe
 2805 2810 2815
 Pro Pro Arg Ile Leu Ser Thr Arg Pro Gly Gln Lys Ser Pro Ile Ile
 2820 2825 2830
 Ile His Asp Asp Asn Ser Ser Asp Lys Asp Arg Glu Asp Ser Ile Thr
 2835 2840 2845
 Tyr Thr Thr Val Asp Trp Arg Asp Phe Met Cys Asn Thr Trp His Leu
 2850 2855 2860
 Glu Pro Thr Leu Arg Leu Ile Ser Trp Thr Gly Arg Lys Ile Asp Pro
 2865 2870 2875 2880
 Val Gly Val Asp Tyr Ile Leu Gln Lys Leu Gly Phe His His Ala Arg
 2885 2890 2895
 Thr Thr Ile Pro Lys Trp Leu Gln Arg Gly Val Met Asp Pro Leu Asp
 2900 2905 2910
 Lys Val Leu Ser Val Leu Ile Lys Lys Leu Gly Thr Ala Leu Gln Asp
 2915 2920 2925
 Glu Lys Glu Lys Lys Gly Lys Asp Lys Glu Glu His *
 2930 2935 2940

<210> 1824

<211> 194

<212> PRT

<213> Homo sapiens

<400> 1824


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Met Glu Gly Cys Val Ser Asn Leu Met Val Cys Asn Leu Ala Tyr Ser
 1          5          10          15
Gly Lys Leu Glu Glu Leu Lys Glu Ser Ile Leu Ala Asp Lys Ser Leu
          20          25          30
Ala Thr Arg Thr Asp Gln Ala Gly Trp Ser Pro Leu His Ile Ala Ala
          35          40          45
Ser Ala Gly Arg Asp Glu Ile Val Lys Ala Leu Leu Gly Lys Gly Ala
          50          55          60
Gln Val Asn Ala Val Asn Gln Asn Gly Cys Thr Pro Leu His Tyr Ala
          65          70          75          80
Ala Ser Lys Asn Arg His Glu Ile Ala Val Met Leu Leu Glu Gly Gly
          85          90          95
Ala Asn Pro Asp Ala Lys Asp His Tyr Glu Ala Thr Ala Met His Arg
          100          105          110
Ala Ala Ala Lys Gly Asn Leu Lys Met Ile His Ile Leu Leu Tyr Tyr
          115          120          125
Lys Ala Ser Thr Asn Ile Gln Asp Thr Glu Gly Asn Thr Pro Leu His
          130          135          140
Leu Ala Cys Asp Glu Glu Arg Val Glu Glu Ala Lys Leu Leu Val Ser
          145          150          155          160
Gln Gly Ala Ser Ile Tyr Ile Glu Asn Lys Glu Glu Lys Thr Pro Leu
          165          170          175
Gln Val Ala Lys Gly Gly Leu Gly Leu Ile Leu Lys Arg Met Val Glu
          180          185          190
Gly *
193

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<210> 1825
<211> 216
<212> PRT
<213> Homo sapiens

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<400> 1825
Met Pro Asp Lys Thr Ala Thr Pro Glu Arg Pro Pro Ala Pro Glu Asn
 1          5          10          15
Ala Pro Ser Ser Lys Lys Ile Pro Ala Pro Asp Lys Val Pro Ser Pro
          20          25          30
Glu Lys Thr Leu Thr Leu Gly Asp Lys Ala Ser Val Pro Gly Asn Ser
          35          40          45
Thr Ser Gly Lys Ile Pro Ala Pro Asp Lys Val Pro Thr Pro Glu Lys
          50          55          60
Met Val Thr Pro Glu Asp Lys Ala Ser Ile Pro Glu Asn Ser Ile Ile
          65          70          75          80
Pro Glu Glu Thr Leu Thr Val Asp Lys Pro Ser Thr Pro Glu Arg Val
          85          90          95
Phe Ser Val Glu Glu Ser Pro Ala Leu Glu Ala Pro Pro Met Asp Lys
          100          105          110
Val Pro Asn Pro Lys Met Ala Pro Leu Gly Asp Glu Ala Pro Thr Leu
          115          120          125
Glu Lys Val Leu Thr Pro Glu Leu Ser Glu Glu Glu Val Ser Thr Arg
          130          135          140
Asp Asp Ile Gln Phe His His Phe Ser Ser Glu Glu Ala Leu Gln Lys
          145          150          155          160
Val Lys Tyr Phe Val Ala Lys Glu Asp Pro Ser Ser Gln Glu Glu Ala
          165          170          175
His Thr Pro Glu Ala Pro Pro Pro Gln Ala Thr Asn Ser Asn Asn Arg
          180          185          190
Glu Ala Gly Ala Leu Pro Ala Cys Gly Pro Arg Ala Lys Pro Trp Thr
          195          200          205
Gly Ser Phe Thr Tyr Ser Ala *
          210          215

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<210> 1826
 <211> 192
 <212> PRT
 <213> Homo sapiens

<400> 1826
 Met Gly Ala Tyr Lys Tyr Ile Gln Glu Leu Trp Arg Lys Lys Gln Ser
 1 5 10 15
 Asp Val Met Arg Phe Leu Leu Arg Val Arg Cys Trp Gln Tyr Arg Gln
 20 25 30
 Leu Ser Ala Leu His Arg Ala Pro Arg Pro Thr Arg Pro Asp Lys Ala
 35 40 45
 Arg Arg Leu Gly Tyr Lys Ala Lys Gln Gly Tyr Val Ile Tyr Arg Ile
 50 55 60
 Arg Val Arg Arg Gly Gly Arg Lys Arg Pro Val Pro Lys Gly Ala Thr
 65 70 75 80
 Tyr Gly Lys Pro Val His His Gly Val Asn Gln Leu Lys Phe Ala Arg
 85 90 95
 Ser Leu Gln Ser Val Ala Glu Glu Arg Ala Gly Arg His Cys Gly Ala
 100 105 110
 Leu Arg Val Leu Asn Ser Tyr Trp Val Gly Glu Asp Ser Thr Tyr Lys
 115 120 125
 Phe Phe Glu Val Ile Leu Ile Asp Pro Phe His Lys Ala Ile Arg Arg
 130 135 140
 Asn Pro Asp Thr Gln Trp Ile Thr Lys Pro Val His Lys His Arg Glu
 145 150 155 160
 Met Arg Gly Leu Thr Ser Ala Gly Arg Lys Ser His Gly Leu Gly Lys
 165 170 175
 Asp Arg Met Phe His His Ala Ile Gly Gly Ser Cys Arg Ala Ala *
 180 185 190 191

<210> 1827
 <211> 588
 <212> PRT
 <213> Homo sapiens

<400> 1827
 Met Asp Ser Arg Val Ser Gly Thr Thr Ser Asn Gly Glu Thr Lys Pro
 1 5 10 15
 Val Tyr Pro Val Met Glu Lys Lys Glu Glu Asp Gly Thr Leu Glu Arg
 20 25 30
 Gly His Trp Asn Asn Lys Met Glu Phe Val Leu Ser Val Ala Gly Glu
 35 40 45
 Ile Ile Gly Leu Gly Asn Val Trp Arg Phe Pro Tyr Leu Cys Tyr Lys
 50 55 60
 Asn Gly Gly Gly Ala Phe Phe Ile Pro Tyr Leu Val Phe Leu Phe Thr
 65 70 75 80
 Cys Gly Ile Pro Val Phe Leu Leu Glu Thr Ala Leu Gly Gln Tyr Thr
 85 90 95
 Ser Gln Gly Gly Val Thr Ala Trp Arg Lys Ile Cys Pro Ile Phe Glu
 100 105 110
 Gly Ile Gly Tyr Ala Ser Gln Met Ile Val Ile Leu Leu Asn Val Tyr
 115 120 125
 Tyr Ile Ile Val Leu Ala Trp Ala Leu Phe Tyr Leu Phe Ser Ser Phe
 130 135 140
 Thr Ile Asp Leu Pro Trp Gly Gly Cys Tyr His Glu Trp Asn Thr Glu
 145 150 155 160


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<210> 1828
<211> 185
<212> PRT
<213> Homo sapiens
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3727


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Met Ala Pro Leu Leu Pro Ile Arg Thr Leu Pro Leu Ile Leu Ile Leu
 1          5          10          15
Leu Ala Leu Leu Ser Pro Gly Ala Ala Asp Phe Asn Ile Ser Ser Leu
          20          25          30
Ser Gly Leu Leu Ser Pro Ala Leu Thr Glu Ser Leu Leu Val Ala Leu
          35          40          45
Pro Pro Cys His Leu Thr Gly Gly Asn Ala Thr Leu Met Val Arg Arg
          50          55          60
Ala Asn Asp Ser Lys Val Val Thr Ser Ser Phe Val Val Pro Pro Cys
          65          70          75          80
Arg Gly Arg Arg Glu Leu Val Ser Val Val Asp Ser Gly Ala Gly Phe
          85          90          95
Thr Val Thr Arg Leu Ser Ala Tyr Gln Val Thr Asn Leu Val Pro Gly
          100          105          110
Thr Lys Phe Tyr Ile Ser Tyr Leu Val Lys Lys Gly Thr Ala Thr Glu
          115          120          125
Ser Ser Arg Glu Ile Pro Met Ser Thr Leu Pro Arg Arg Asn Met Glu
          130          135          140
Ser Ile Gly Leu Gly Met Ala Arg Thr Gly Gly Met Val Val Ile Thr
          145          150          155          160
Val Leu Leu Ser Val Ala Met Phe Leu Leu Val Leu Gly Phe Ile Ile
          165          170          175
Ala Leu Ala Leu Gly Ser Arg Lys *
          180          184

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<210> 1829

<211> 526

<212> PRT

<213> Homo sapiens

<400> 1829

```

Met Ala Ala Val Val Leu Ala Ala Thr Arg Leu Leu Arg Gly Ser Gly
 1          5          10          15
Ser Trp Gly Cys Ser Arg Leu Arg Phe Gly Pro Pro Ala Tyr Arg Arg
          20          25          30
Phe Ser Ser Gly Gly Ala Tyr Pro Asn Ile Pro Leu Ser Ser Pro Leu
          35          40          45
Pro Gly Val Pro Lys Pro Val Phe Ala Thr Val Asp Gly Gln Glu Lys
          50          55          60
Phe Glu Thr Lys Val Thr Thr Leu Asp Asn Gly Leu Arg Val Ala Ser
          65          70          75          80
Gln Asn Lys Phe Gly Gln Phe Cys Thr Val Gly Ile Leu Ile Asn Ser
          85          90          95
Gly Ser Arg Tyr Glu Ala Lys Tyr Leu Ser Gly Ile Ala His Phe Leu
          100          105          110
Glu Lys Leu Ala Phe Ser Ser Thr Ala Arg Phe Asp Ser Lys Asp Glu
          115          120          125
Ile Leu Leu Thr Leu Glu Lys His Gly Gly Ile Cys Asp Cys Gln Thr
          130          135          140
Ser Arg Asp Thr Thr Met Tyr Ala Val Ser Ala Asp Ser Lys Gly Leu
          145          150          155          160
Asp Thr Val Val Ala Leu Leu Ala Asp Val Val Leu Gln Pro Arg Leu
          165          170          175
Thr Asp Glu Glu Val Glu Met Thr Arg Met Ala Val Gln Phe Glu Leu
          180          185          190
Glu Asp Leu Asn Leu Arg Pro Asp Pro Glu Pro Leu Leu Thr Glu Met
          195          200          205
Ile His Glu Ala Ala Tyr Arg Glu Asn Thr Val Gly Leu His Arg Phe
          210          215          220
Cys Pro Thr Glu Asn Val Ala Lys Ile Asn Arg Glu Val Leu His Ser
          225          230          235          240

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Tyr Leu Arg Asn Tyr Tyr Thr Pro Asp Arg Met Val Leu Ala Gly Val
 245 250 255
 Gly Val Glu His Glu His Leu Val Asp Cys Ala Arg Lys Tyr Leu Leu
 260 265 270
 Gly Val Gln Pro Ala Trp Gly Ser Ala Glu Ala Val Asp Ile Asp Arg
 275 280 285
 Ser Val Ala Gln Tyr Thr Gly Gly Ile Ala Lys Leu Glu Arg Asp Met
 290 295 300
 Ser Asn Val Ser Leu Gly Pro Thr Pro Ile Pro Glu Leu Thr His Ile
 305 310 315 320
 Met Val Gly Leu Glu Ser Cys Ser Phe Leu Glu Glu Asp Phe Ile Pro
 325 330 335
 Phe Ala Val Leu Asn Met Met Met Gly Gly Gly Gly Ser Phe Ser Ala
 340 345 350
 Gly Gly Pro Gly Lys Gly Met Phe Ser Arg Leu Tyr Leu Asn Val Leu
 355 360 365
 Asn Arg His His Trp Met Tyr Asn Ala Thr Ser Tyr His His Ser Tyr
 370 375 380
 Glu Asp Thr Gly Leu Leu Cys Ile His Ala Ser Ala Asp Pro Arg Gln
 385 390 395 400
 Val Arg Glu Met Val Glu Ile Ile Thr Lys Glu Phe Ile Leu Met Gly
 405 410 415
 Gly Thr Val Asp Thr Val Glu Leu Glu Arg Ala Lys Thr Gln Leu Thr
 420 425 430
 Ser Met Leu Met Met Asn Leu Glu Ser Arg Pro Val Ile Phe Glu Asp
 435 440 445
 Val Gly Arg Gln Val Leu Ala Thr Arg Ser Arg Lys Leu Pro His Glu
 450 455 460
 Leu Cys Thr Leu Ile Arg Asn Val Lys Pro Glu Asp Val Lys Arg Val
 465 470 475 480
 Ala Ser Lys Met Leu Arg Gly Lys Pro Ala Val Ala Ala Leu Gly Asp
 485 490 495
 Leu Thr Asp Leu Pro Thr Tyr Glu His Ile Gln Thr Ala Leu Ser Ser
 500 505 510
 Lys Asp Gly Arg Leu Pro Arg Thr Tyr Arg Leu Phe Arg *
 515 520 525

<210> 1830

<211> 1360

<212> PRT

<213> Homo sapiens

<400> 1830

Met Ala Glu Ala Gly Leu Arg Gly Trp Leu Leu Trp Ala Leu Leu Leu
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 Arg Leu Ala Gln Ser Glu Pro Tyr Thr Thr Ile His Gln Pro Gly Tyr
 20 25 30
 Cys Ala Phe Tyr Asp Glu Cys Gly Lys Asn Pro Glu Leu Ser Gly Ser
 35 40 45
 Leu Met Thr Leu Ser Asn Val Ser Cys Leu Ser Asn Thr Pro Ala Arg
 50 55 60
 Lys Ile Thr Gly Asp His Leu Ile Leu Leu Gln Lys Ile Cys Pro Arg
 65 70 75 80
 Leu Tyr Thr Gly Pro Asn Thr Gln Ala Cys Cys Ser Ala Lys Gln Leu
 85 90 95
 Val Ser Leu Glu Ala Ser Leu Ser Ile Thr Lys Ala Leu Leu Thr Arg
 100 105 110
 Cys Pro Ala Cys Ser Asp Asn Phe Val Asn Leu His Cys His Asn Thr
 115 120 125
 Cys Ser Pro Asn Gln Ser Leu Phe Ile Asn Val Thr Arg Val Ala Gln
 130 135 140

Leu	Gly	Ala	Gly	Gln	Leu	Pro	Ala	Val	Val	Ala	Tyr	Glu	Ala	Phe	Tyr
145					150					155					160
Gln	His	Ser	Phe	Ala	Glu	Gln	Ser	Tyr	Asp	Ser	Cys	Ser	Arg	Val	Arg
				165					170						175
Val	Pro	Ala	Ala	Ala	Thr	Leu	Ala	Val	Gly	Thr	Met	Cys	Gly	Val	Tyr
			180					185					190		
Gly	Ser	Ala	Leu	Cys	Asn	Ala	Gln	Arg	Trp	Leu	Asn	Phe	Gln	Gly	Asp
		195					200					205			
Thr	Gly	Asn	Gly	Leu	Ala	Pro	Leu	Asp	Ile	Thr	Phe	His	Leu	Leu	Glu
	210					215					220				
Pro	Gly	Gln	Ala	Val	Gly	Ser	Gly	Ile	Gln	Pro	Leu	Asn	Glu	Gly	Val
225					230					235					240
Ala	Arg	Cys	Asn	Glu	Ser	Gln	Gly	Asp	Asp	Val	Ala	Thr	Cys	Ser	Cys
				245					250					255	
Gln	Asp	Cys	Ala	Ala	Ser	Cys	Pro	Ala	Ile	Ala	Arg	Pro	Gln	Ala	Leu
			260					265					270		
Asp	Ser	Thr	Phe	Tyr	Leu	Gly	Gln	Met	Pro	Gly	Ser	Leu	Val	Leu	Ile
		275					280					285			
Ile	Ile	Leu	Cys	Ser	Val	Phe	Ala	Val	Val	Thr	Ile	Leu	Leu	Val	Gly
	290					295					300				
Phe	Arg	Val	Ala	Pro	Ala	Arg	Asp	Lys	Ser	Lys	Met	Val	Asp	Pro	Lys
305					310					315					320
Lys	Gly	Thr	Ser	Leu	Ser	Asp	Lys	Leu	Ser	Phe	Ser	Thr	His	Thr	Leu
				325					330					335	
Leu	Gly	Gln	Phe	Phe	Gln	Gly	Trp	Gly	Thr	Trp	Val	Ala	Ser	Trp	Pro
		340						345					350		
Leu	Thr	Ile	Leu	Val	Leu	Ser	Val	Ile	Pro	Val	Val	Ala	Leu	Ala	Ala
	355						360					365			
Gly	Leu	Val	Phe	Thr	Glu	Leu	Thr	Thr	Asp	Pro	Val	Glu	Leu	Trp	Ser
	370					375					380				
Ala	Pro	Asn	Ser	Gln	Ala	Arg	Ser	Glu	Lys	Ala	Phe	His	Asp	Gln	His
385					390					395					400
Phe	Gly	Pro	Phe	Phe	Arg	Thr	Asn	Gln	Val	Ile	Leu	Thr	Ala	Pro	Asn
				405					410					415	
Arg	Ser	Ser	Tyr	Arg	Tyr	Asp	Ser	Leu	Leu	Leu	Gly	Pro	Lys	Asn	Phe
			420					425					430		
Ser	Gly	Ile	Leu	Asp	Leu	Asp	Leu	Leu	Leu	Glu	Leu	Leu	Glu	Leu	Gln
	435					440						445			
Glu	Arg	Leu	Arg	His	Leu	Gln	Val	Trp	Ser	Pro	Glu	Ala	Gln	Arg	Asn
	450					455					460				
Ile	Ser	Leu	Gln	Asp	Ile	Cys	Tyr	Ala	Pro	Leu	Asn	Pro	Asp	Asn	Thr
465					470					475					480
Ser	Leu	Tyr	Asp	Cys	Cys	Ile	Asn	Ser	Leu	Leu	Gln	Tyr	Phe	Gln	Asn
			485						490					495	
Asn	Arg	Thr	Leu	Leu	Leu	Leu	Thr	Ala	Asn	Gln	Thr	Leu	Met	Gly	Gln
		500						505					510		
Thr	Ser	Gln	Val	Asp	Trp	Lys	Asp	His	Phe	Leu	Tyr	Cys	Ala	Asn	Ala
	515						520					525			
Pro	Leu	Thr	Phe	Lys	Asp	Gly	Thr	Ala	Leu	Ala	Leu	Ser	Cys	Met	Ala
	530					535					540				
Asp	Tyr	Gly	Ala	Pro	Val	Phe	Pro	Phe	Leu	Ala	Ile	Gly	Gly	Tyr	Lys
545					550					555					560
Gly	Lys	Asp	Tyr	Ser	Glu	Ala	Glu	Ala	Leu	Ile	Met	Thr	Phe	Ser	Leu
				565					570					575	
Asn	Asn	Tyr	Pro	Ala	Gly	Asp	Pro	Arg	Leu	Ala	Gln	Ala	Lys	Leu	Trp
			580					585					590		
Glu	Glu	Ala	Phe	Leu	Glu	Glu	Met	Arg	Ala	Phe	Gln	Arg	Arg	Met	Ala
	595						600				605				
Gly	Met	Phe	Gln	Val	Thr	Phe	Met	Ala	Glu	Arg	Ser	Leu	Glu	Asp	Glu
	610					615					620				
Ile	Asn	Arg	Thr	Thr	Ala	Glu	Asp	Leu	Pro	Ile	Phe	Ala	Thr	Ser	Tyr
625					630					635					640
Ile	Val	Ile	Phe	Leu	Tyr	Ile	Ser	Leu	Ala	Leu	Gly	Ser	Tyr	Ser	Ser
				645					650					655	

Trp	Ser	Arg	Val	Met	Val	Asp	Ser	Lys	Ala	Thr	Leu	Gly	Leu	Gly	Gly
			660					665					670		
Val	Ala	Val	Val	Leu	Gly	Ala	Val	Met	Ala	Ala	Met	Gly	Phe	Phe	Ser
		675					680					685			
Tyr	Leu	Gly	Ile	Arg	Ser	Ser	Leu	Val	Ile	Leu	Gln	Val	Val	Pro	Phe
	690				695						700				
Leu	Val	Leu	Ser	Val	Gly	Ala	Asp	Asn	Ile	Phe	Ile	Phe	Val	Leu	Glu
705					710					715					720
Tyr	Gln	Arg	Leu	Pro	Arg	Arg	Pro	Gly	Glu	Pro	Arg	Glu	Val	His	Ile
				725					730					735	
Gly	Arg	Ala	Leu	Gly	Arg	Val	Ala	Pro	Ser	Met	Leu	Leu	Cys	Ser	Leu
			740					745					750		
Ser	Glu	Ala	Ile	Cys	Phe	Phe	Leu	Gly	Ala	Leu	Thr	Pro	Met	Pro	Ala
		755					760					765			
Val	Arg	Thr	Phe	Ala	Leu	Thr	Ser	Gly	Leu	Ala	Val	Ile	Leu	Asp	Phe
	770					775					780				
Leu	Leu	Gln	Met	Ser	Ala	Phe	Val	Ala	Leu	Leu	Ser	Leu	Asp	Ser	Lys
785					790					795					800
Arg	Gln	Glu	Ala	Ser	Arg	Leu	Asp	Val	Cys	Cys	Cys	Val	Lys	Pro	Gln
				805					810					815	
Glu	Leu	Pro	Pro	Pro	Gly	Gln	Gly	Glu	Gly	Leu	Leu	Leu	Gly	Phe	Phe
			820					825					830		
Gln	Lys	Ala	Tyr	Ala	Pro	Phe	Leu	Leu	His	Trp	Ile	Thr	Arg	Gly	Val
		835					840						845		
Val	Leu	Leu	Leu	Phe	Leu	Ala	Leu	Phe	Gly	Val	Ser	Leu	Tyr	Ser	Met
	850					855					860				
Cys	His	Ile	Ser	Val	Gly	Leu	Asp	Gln	Glu	Leu	Ala	Leu	Pro	Lys	Asp
865					870					875					880
Ser	Tyr	Leu	Leu	Asp	Tyr	Phe	Leu	Phe	Leu	Asn	Arg	Tyr	Phe	Glu	Val
				885					890					895	
Gly	Ala	Pro	Val	Tyr	Phe	Val	Thr	Thr	Leu	Gly	Tyr	Asn	Phe	Ser	Ser
			900					905					910		
Glu	Ala	Gly	Met	Asn	Ala	Ile	Cys	Ser	Ser	Ala	Gly	Cys	Asn	Asn	Phe
		915					920					925			
Ser	Phe	Thr	Gln	Lys	Ile	Gln	Tyr	Ala	Thr	Glu	Phe	Pro	Glu	Gln	Ser
	930					935						940			
Tyr	Leu	Ala	Ile	Pro	Ala	Ser	Ser	Trp	Val	Asp	Asp	Phe	Ile	Asp	Trp
945					950					955					960
Leu	Thr	Pro	Ser	Ser	Cys	Cys	Arg	Leu	Tyr	Ile	Ser	Gly	Pro	Asn	Lys
				965					970					975	
Asp	Lys	Phe	Cys	Pro	Ser	Thr	Val	Asn	Ser	Leu	Asn	Cys	Leu	Lys	Asn
			980					985					990		
Cys	Met	Ser	Ile	Thr	Met	Gly	Ser	Val	Arg	Pro	Ser	Val	Glu	Gln	Phe
		995				1000						1005			
His	Lys	Tyr	Leu	Pro	Trp	Phe	Leu	Asn	Asp	Arg	Pro	Asn	Ile	Lys	Cys
	1010					1015					1020				
Pro	Lys	Gly	Gly	Leu	Ala	Ala	Tyr	Ser	Thr	Ser	Val	Asn	Leu	Thr	Ser
1025				1030					1035					1040	
Asp	Gly	Gln	Val	Leu	Asp	Thr	Val	Ala	Ile	Leu	Ser	Pro	Arg	Leu	Glu
				1045				1050					1055		
Tyr	Ser	Gly	Thr	Ile	Ser	Ala	His	Cys	Asn	Leu	Tyr	Leu	Leu	Asp	Ser
		1060					1065					1070			
Ala	Ser	Arg	Phe	Met	Ala	Tyr	His	Lys	Pro	Leu	Lys	Asn	Ser	Gln	Asp
		1075					1080					1085			
Tyr	Thr	Glu	Ala	Leu	Arg	Ala	Ala	Arg	Glu	Leu	Ala	Ala	Asn	Ile	Thr
	1090					1095						1100			
Ala	Asp	Leu	Arg	Lys	Val	Pro	Gly	Thr	Asp	Pro	Ala	Phe	Glu	Val	Phe
1105				1110					1115					1120	
Pro	Tyr	Thr	Ile	Thr	Asn	Val	Phe	Tyr	Glu	Gln	Tyr	Leu	Thr	Ile	Leu
				1125					1130				1135		
Pro	Glu	Gly	Leu	Phe	Met	Leu	Ser	Leu	Cys	Leu	Val	Pro	Thr	Phe	Ala
		1140						1145				1150			
Val	Ser	Cys	Leu	Leu	Leu	Gly	Leu	Asp	Leu	Arg	Ser	Gly	Leu	Leu	Asn
		1155				1160						1165			

Leu Leu Ser Ile Val Met Ile Leu Val Asp Thr Val Gly Phe Met Ala
 1170 1175 1180
 Leu Trp Gly Ile Ser Tyr Asn Ala Val Ser Leu Ile Asn Leu Val Ser
 1185 1190 1195 1200
 Ala Val Gly Met Ser Val Glu Phe Val Ser His Ile Thr Arg Ser Phe
 1205 1210 1215
 Ala Ile Ser Thr Lys Pro Thr Trp Leu Glu Arg Ala Lys Glu Ala Thr
 1220 1225 1230
 Ile Ser Met Gly Ser Ala Val Phe Ala Gly Val Ala Met Thr Asn Leu
 1235 1240 1245
 Pro Gly Ile Leu Val Leu Gly Leu Ala Lys Ala Gln Leu Ile Gln Ile
 1250 1255 1260
 Phe Phe Phe Arg Leu Asn Leu Leu Ile Thr Leu Leu Gly Leu Leu His
 1265 1270 1275 1280
 Gly Leu Val Phe Leu Pro Val Ile Leu Ser Tyr Val Gly Pro Asp Val
 1285 1290 1295
 Asn Pro Ala Leu Ala Leu Glu Gln Lys Arg Ala Glu Glu Ala Val Ala
 1300 1305 1310
 Ala Val Met Val Ala Ser Cys Pro Asn His Pro Ser Arg Val Ser Thr
 1315 1320 1325
 Ala Asp Asn Ile Tyr Val Asn His Ser Phe Glu Gly Ser Ile Lys Gly
 1330 1335 1340
 Ala Gly Ala Ile Ser Asn Phe Leu Pro Asn Asn Gly Arg Gln Phe *
 1345 1350 1355 1359

<210> 1831

<211> 1333

<212> PRT

<213> Homo sapiens

<400> 1831

Met Ala Glu Ala Gly Leu Arg Gly Trp Leu Leu Trp Ala Leu Leu Leu
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 Arg Leu Ala Gln Ser Glu Pro Tyr Thr Thr Ile His Gln Pro Gly Tyr
 20 25 30
 Cys Ala Phe Tyr Asp Glu Cys Gly Lys Asn Pro Glu Leu Ser Gly Ser
 35 40 45
 Leu Met Thr Leu Ser Asn Val Ser Cys Leu Ser Asn Thr Pro Ala Arg
 50 55 60
 Lys Ile Thr Gly Asp His Leu Ile Leu Leu Gln Lys Ile Cys Pro Arg
 65 70 75 80
 Leu Tyr Thr Gly Pro Asn Thr Gln Ala Cys Cys Ser Ala Lys Gln Leu
 85 90 95
 Val Ser Leu Glu Ala Ser Leu Ser Ile Thr Lys Ala Leu Leu Thr Arg
 100 105 110
 Cys Pro Ala Cys Ser Asp Asn Phe Val Asn Leu His Cys His Asn Thr
 115 120 125
 Cys Ser Pro Asn Gln Ser Leu Phe Ile Asn Val Thr Arg Val Ala Gln
 130 135 140
 Leu Gly Ala Gly Gln Leu Pro Ala Val Val Ala Tyr Glu Ala Phe Tyr
 145 150 155 160
 Gln His Ser Phe Ala Glu Gln Ser Tyr Asp Ser Cys Ser Arg Val Arg
 165 170 175
 Val Pro Ala Ala Ala Thr Leu Ala Val Gly Thr Met Cys Gly Val Tyr
 180 185 190
 Gly Ser Ala Leu Cys Asn Ala Gln Arg Trp Leu Asn Phe Gln Gly Asp
 195 200 205
 Thr Gly Asn Gly Leu Ala Pro Leu Asp Ile Thr Phe His Leu Leu Glu
 210 215 220
 Pro Gly Gln Ala Val Gly Ser Gly Ile Gln Pro Leu Asn Glu Gly Val
 225 230 235 240

Ala	Arg	Cys	Asn	Glu	Ser	Gln	Gly	Asp	Asp	Val	Ala	Thr	Cys	Ser	Cys
				245					250					255	
Gln	Asp	Cys	Ala	Ala	Ser	Cys	Pro	Ala	Ile	Ala	Arg	Pro	Gln	Ala	Leu
			260					265					270		
Asp	Ser	Thr	Phe	Tyr	Leu	Gly	Gln	Met	Pro	Gly	Ser	Leu	Val	Leu	Ile
		275					280					285			
Ile	Ile	Leu	Cys	Ser	Val	Phe	Ala	Val	Val	Thr	Ile	Leu	Leu	Val	Gly
		290				295					300				
Phe	Arg	Val	Ala	Pro	Ala	Arg	Asp	Lys	Ser	Lys	Met	Val	Asp	Pro	Lys
305					310					315				320	
Lys	Gly	Thr	Ser	Leu	Ser	Asp	Lys	Leu	Ser	Phe	Ser	Thr	His	Thr	Leu
				325					330					335	
Leu	Gly	Gln	Phe	Phe	Gln	Gly	Trp	Gly	Thr	Trp	Val	Ala	Ser	Trp	Pro
			340					345					350		
Leu	Thr	Ile	Leu	Val	Leu	Ser	Val	Ile	Pro	Val	Val	Ala	Leu	Ala	Ala
		355					360					365			
Gly	Leu	Val	Phe	Thr	Glu	Leu	Thr	Thr	Asp	Pro	Val	Glu	Leu	Trp	Ser
	370					375					380				
Ala	Pro	Asn	Ser	Gln	Ala	Arg	Ser	Glu	Lys	Ala	Phe	His	Asp	Gln	His
385					390					395				400	
Phe	Gly	Pro	Phe	Phe	Arg	Thr	Asn	Gln	Val	Ile	Leu	Thr	Ala	Pro	Asn
				405					410					415	
Arg	Ser	Ser	Tyr	Arg	Tyr	Asp	Ser	Leu	Leu	Leu	Gly	Pro	Lys	Asn	Phe
			420					425					430		
Ser	Gly	Ile	Leu	Asp	Leu	Asp	Leu	Leu	Leu	Glu	Leu	Leu	Glu	Leu	Gln
		435					440					445			
Glu	Arg	Leu	Arg	His	Leu	Gln	Val	Trp	Ser	Pro	Glu	Ala	Gln	Arg	Asn
	450					455					460				
Ile	Ser	Leu	Gln	Asp	Ile	Cys	Tyr	Ala	Pro	Leu	Asn	Pro	Asp	Asn	Thr
465					470					475					480
Ser	Leu	Tyr	Asp	Cys	Cys	Ile	Asn	Ser	Leu	Leu	Gln	Tyr	Phe	Gln	Asn
			485						490					495	
Asn	Arg	Thr	Leu	Leu	Leu	Leu	Thr	Ala	Asn	Gln	Thr	Leu	Met	Gly	Gln
			500					505					510		
Thr	Ser	Gln	Val	Asp	Trp	Lys	Asp	His	Phe	Leu	Tyr	Cys	Ala	Asn	Ala
		515					520					525			
Pro	Leu	Thr	Phe	Lys	Asp	Gly	Thr	Ala	Leu	Ala	Leu	Ser	Cys	Met	Ala
	530					535					540				
Asp	Tyr	Gly	Ala	Pro	Val	Phe	Pro	Phe	Leu	Ala	Ile	Gly	Gly	Tyr	Lys
545					550					555				560	
Gly	Lys	Asp	Tyr	Ser	Glu	Ala	Glu	Ala	Leu	Ile	Met	Thr	Phe	Ser	Leu
				565					570					575	
Asn	Asn	Tyr	Pro	Ala	Gly	Asp	Pro	Arg	Leu	Ala	Gln	Ala	Lys	Leu	Trp
			580					585					590		
Glu	Glu	Ala	Phe	Leu	Glu	Glu	Met	Arg	Ala	Phe	Gln	Arg	Arg	Met	Ala
		595					600				605				
Gly	Met	Phe	Gln	Val	Thr	Phe	Met	Ala	Glu	Arg	Ser	Leu	Glu	Asp	Glu
	610					615					620				
Ile	Asn	Arg	Thr	Thr	Ala	Glu	Asp	Leu	Pro	Ile	Phe	Ala	Thr	Ser	Tyr
625					630					635					640
Ile	Val	Ile	Phe	Leu	Tyr	Ile	Ser	Leu	Ala	Leu	Gly	Ser	Tyr	Ser	Ser
			645					650						655	
Trp	Ser	Arg	Val	Met	Val	Asp	Ser	Lys	Ala	Thr	Leu	Gly	Leu	Gly	Gly
			660					665					670		
Val	Ala	Val	Val	Leu	Gly	Ala	Val	Met	Ala	Ala	Met	Gly	Phe	Phe	Ser
		675					680				685				
Tyr	Leu	Gly	Ile	Arg	Ser	Ser	Leu	Val	Ile	Leu	Gln	Val	Val	Pro	Phe
	690					695					700				
Leu	Val	Leu	Ser	Val	Gly	Ala	Asp	Asn	Ile	Phe	Ile	Phe	Val	Leu	Glu
705					710					715				720	
Tyr	Gln	Arg	Leu	Pro	Arg	Arg	Pro	Gly	Glu	Pro	Arg	Glu	Val	His	Ile
				725					730					735	
Gly	Arg	Ala	Leu	Gly	Arg	Val	Ala	Pro	Ser	Met	Leu	Leu	Cys	Ser	Leu
			740					745					750		

Ser	Glu	Ala	Ile	Cys	Phe	Phe	Leu	Gly	Ala	Leu	Thr	Pro	Met	Pro	Ala	755	760	765
Val	Arg	Thr	Phe	Ala	Leu	Thr	Ser	Gly	Leu	Ala	Val	Ile	Leu	Asp	Phe	770	775	780
Leu	Leu	Gln	Met	Ser	Ala	Phe	Val	Ala	Leu	Leu	Ser	Leu	Asp	Ser	Lys	785	790	795
Arg	Gln	Glu	Ala	Ser	Arg	Leu	Asp	Val	Cys	Cys	Cys	Val	Lys	Pro	Gln	805	810	815
Glu	Leu	Pro	Pro	Pro	Gly	Gln	Gly	Glu	Gly	Leu	Leu	Leu	Gly	Phe	Phe	820	825	830
Gln	Lys	Ala	Tyr	Ala	Pro	Phe	Leu	Leu	His	Trp	Ile	Thr	Arg	Gly	Val	835	840	845
Val	Leu	Leu	Leu	Phe	Leu	Ala	Leu	Phe	Gly	Val	Ser	Leu	Tyr	Ser	Met	850	855	860
Cys	His	Ile	Ser	Val	Gly	Leu	Asp	Gln	Glu	Leu	Ala	Leu	Pro	Lys	Asp	865	870	875
Ser	Tyr	Leu	Leu	Asp	Tyr	Phe	Leu	Phe	Leu	Asn	Arg	Tyr	Phe	Glu	Val	885	890	895
Gly	Ala	Pro	Val	Tyr	Phe	Val	Thr	Thr	Leu	Gly	Tyr	Asn	Phe	Ser	Ser	900	905	910
Glu	Ala	Gly	Met	Asn	Ala	Ile	Cys	Ser	Ser	Ala	Gly	Cys	Asn	Asn	Phe	915	920	925
Ser	Phe	Thr	Gln	Lys	Ile	Gln	Tyr	Ala	Thr	Glu	Phe	Pro	Glu	Gln	Ser	930	935	940
Tyr	Leu	Ala	Ile	Pro	Ala	Ser	Ser	Trp	Val	Asp	Asp	Phe	Ile	Asp	Trp	945	950	955
Leu	Thr	Pro	Ser	Ser	Cys	Cys	Arg	Leu	Tyr	Ile	Ser	Gly	Pro	Asn	Lys	965	970	975
Asp	Lys	Phe	Cys	Pro	Ser	Thr	Val	Asn	Ser	Leu	Asn	Cys	Leu	Lys	Asn	980	985	990
Cys	Met	Ser	Ile	Thr	Met	Gly	Ser	Val	Arg	Pro	Ser	Val	Glu	Gln	Phe	995	1000	1005
His	Lys	Tyr	Leu	Pro	Trp	Phe	Leu	Asn	Asp	Arg	Pro	Asn	Ile	Lys	Cys	1010	1015	1020
Pro	Lys	Gly	Gly	Leu	Ala	Ala	Tyr	Ser	Thr	Ser	Val	Asn	Leu	Thr	Ser	1025	1030	1035
Asp	Gly	Gln	Val	Leu	Ala	Ser	Arg	Phe	Met	Ala	Tyr	His	Lys	Pro	Leu	1045	1050	1055
Lys	Asn	Ser	Gln	Asp	Tyr	Thr	Glu	Ala	Leu	Arg	Ala	Ala	Arg	Glu	Leu	1060	1065	1070
Ala	Ala	Asn	Ile	Thr	Ala	Asp	Leu	Arg	Lys	Val	Pro	Gly	Thr	Asp	Pro	1075	1080	1085
Ala	Phe	Glu	Val	Phe	Pro	Tyr	Thr	Ile	Thr	Asn	Val	Phe	Tyr	Glu	Gln	1090	1095	1100
Tyr	Leu	Thr	Ile	Leu	Pro	Glu	Gly	Leu	Phe	Met	Leu	Ser	Leu	Cys	Leu	1105	1110	1115
Val	Pro	Thr	Phe	Ala	Val	Ser	Cys	Leu	Leu	Leu	Gly	Leu	Asp	Leu	Arg	1125	1130	1135
Ser	Gly	Leu	Leu	Asn	Leu	Leu	Ser	Ile	Val	Met	Ile	Leu	Val	Asp	Thr	1140	1145	1150
Val	Gly	Phe	Met	Ala	Leu	Trp	Gly	Ile	Ser	Tyr	Asn	Ala	Val	Ser	Leu	1155	1160	1165
Ile	Asn	Leu	Val	Ser	Ala	Val	Gly	Met	Ser	Val	Glu	Phe	Val	Ser	His	1170	1175	1180
Ile	Thr	Arg	Ser	Phe	Ala	Ile	Ser	Thr	Lys	Pro	Thr	Trp	Leu	Glu	Arg	1185	1190	1195
Ala	Lys	Glu	Ala	Thr	Ile	Ser	Met	Gly	Ser	Ala	Val	Phe	Ala	Gly	Val	1205	1210	1215
Ala	Met	Thr	Asn	Leu	Pro	Gly	Ile	Leu	Val	Leu	Gly	Leu	Ala	Lys	Ala	1220	1225	1230
Gln	Leu	Ile	Gln	Ile	Phe	Phe	Phe	Arg	Leu	Asn	Leu	Leu	Ile	Thr	Leu	1235	1240	1245
Leu	Gly	Leu	Leu	His	Gly	Leu	Val	Phe	Leu	Pro	Val	Ile	Leu	Ser	Tyr	1250	1255	1260

Val Gly Pro Asp Val Asn Pro Ala Leu Ala Leu Glu Gln Lys Arg Ala
 1265 1270 1275 1280
 Glu Glu Ala Val Ala Ala Val Met Val Ala Ser Cys Pro Asn His Pro
 1285 1290 1295
 Ser Arg Val Ser Thr Ala Asp Asn Ile Tyr Val Asn His Ser Phe Glu
 1300 1305 1310
 Gly Ser Ile Lys Gly Ala Gly Ala Ile Ser Asn Phe Leu Pro Asn Asn
 1315 1320 1325
 Gly Arg Gln Phe *
 1330 1332

<210> 1832
 <211> 226
 <212> PRT
 <213> Homo sapiens

<400> 1832
 Met Gly Phe Gly Asp Leu Lys Ser Pro Ala Gly Leu Gln Val Leu Asn
 1 5 10 15
 Asp Tyr Leu Ala Asp Lys Ser Tyr Ile Glu Gly Tyr Val Pro Ser Gln
 20 25 30
 Ala Asp Val Ala Val Phe Glu Ala Val Ser Ser Pro Pro Pro Ala Asp
 35 40 45
 Leu Cys His Ala Leu Arg Trp Tyr Asn His Ile Lys Ser Tyr Glu Lys
 50 55 60
 Glu Lys Ala Ser Leu Pro Gly Val Lys Lys Ala Leu Gly Lys Tyr Gly
 65 70 75 80
 Pro Ala Asp Val Glu Asp Thr Thr Gly Ser Gly Ala Thr Asp Ser Lys
 85 90 95
 Asp Asp Asp Asp Ile Asp Leu Phe Gly Ser Asp Asp Glu Glu Glu Ser
 100 105 110
 Glu Glu Ala Lys Arg Leu Arg Glu Glu Arg Leu Ala Gln Tyr Glu Ser
 115 120 125
 Lys Lys Ala Lys Lys Pro Ala Leu Val Ala Lys Ser Ser Ile Leu Leu
 130 135 140
 Asp Val Lys Pro Trp Asp Asp Glu Thr Asp Met Ala Lys Leu Glu Glu
 145 150 155 160
 Cys Val Arg Ser Ile Gln Ala Asp Gly Leu Val Trp Gly Ser Ser Lys
 165 170 175
 Leu Val Pro Val Gly Tyr Gly Ile Lys Lys Leu Gln Ile Gln Cys Val
 180 185 190
 Val Glu Asp Asp Lys Val Gly Thr Asp Met Leu Glu Glu Gln Ile Thr
 195 200 205
 Ala Phe Glu Asp Tyr Val Gln Ser Met Asp Val Ala Ala Phe Asn Lys
 210 215 220
 Ile *
 225

<210> 1833
 <211> 653
 <212> PRT
 <213> Homo sapiens

<400> 1833
 Met Ile Asn Met Cys Phe Gln Glu Leu Val Thr Phe Arg Asp Val Ala
 1 5 10 15
 Ile Glu Phe Ser Pro Glu Glu Trp Lys Cys Leu Asp Pro Ala Gln Gln
 20 25 30

Asn	Leu	Tyr	Arg	Asp	Val	Met	Leu	Glu	Asn	Tyr	Arg	Asn	Leu	Val	Ser
	35						40					45			
Leu	Gly	Phe	Val	Ile	Ser	Asn	Pro	Asp	Leu	Val	Thr	Cys	Leu	Glu	Gln
	50					55					60				
Ile	Lys	Glu	Pro	Cys	Asn	Leu	Lys	Ile	His	Glu	Thr	Ala	Ala	Lys	Pro
65					70					75					80
Pro	Ala	Ile	Cys	Ser	Pro	Phe	Ser	Gln	Asp	Leu	Ser	Pro	Val	Gln	Gly
				85					90					95	
Ile	Glu	Asp	Ser	Phe	His	Lys	Leu	Ile	Leu	Lys	Arg	Tyr	Glu	Lys	Cys
			100					105					110		
Gly	His	Glu	Asn	Leu	Gln	Leu	Arg	Lys	Gly	Cys	Lys	Arg	Val	Asn	Glu
	115						120					125			
Cys	Lys	Val	Gln	Lys	Gly	Val	Asn	Asn	Gly	Val	Tyr	Gln	Cys	Leu	Ser
	130					135					140				
Thr	Thr	Gln	Ser	Lys	Ile	Phe	Gln	Cys	Asn	Thr	Cys	Val	Lys	Val	Phe
145					150					155					160
Ser	Lys	Phe	Ser	Asn	Ser	Asn	Lys	His	Lys	Ile	Arg	His	Thr	Gly	Glu
				165					170					175	
Lys	Pro	Phe	Lys	Cys	Thr	Glu	Cys	Gly	Arg	Ser	Phe	Tyr	Met	Ser	His
			180					185					190		
Leu	Thr	Gln	His	Thr	Gly	Ile	His	Ala	Gly	Glu	Lys	Pro	Tyr	Asn	Val
	195						200					205			
Lys	Asn	Val	Ala	Lys	Leu	Tyr	Arg	Val	His	Asn	Pro	Leu	Asn	Glu	His
	210					215					220				
Lys	Arg	Ile	His	Thr	Gly	Glu	Lys	Pro	Tyr	Thr	Cys	Glu	Glu	Cys	Gly
225					230					235					240
Lys	Ala	Leu	Asp	Val	Leu	Asn	Glu	His	Lys	Lys	Ile	His	Thr	Gly	Glu
				245					250					255	
Lys	Pro	Tyr	Lys	Cys	Glu	Glu	Cys	Gly	Lys	Ala	Phe	Thr	Arg	Ser	Thr
			260					265					270		
Thr	Leu	Asn	Glu	His	Lys	Lys	Ile	His	Thr	Gly	Glu	Lys	Pro	Tyr	Lys
	275						280					285			
Cys	Lys	Glu	Cys	Gly	Lys	Ala	Phe	Arg	Trp	Ser	Thr	Ser	Leu	Asn	Glu
	290					295					300				
His	Lys	Asn	Ile	His	Thr	Gly	Glu	Lys	Pro	Tyr	Lys	Cys	Lys	Glu	Cys
305					310					315					320
Gly	Lys	Ala	Phe	Arg	Gln	Ser	Arg	Ser	Leu	Asn	Glu	His	Lys	Asn	Ile
				325					330					335	
His	Thr	Gly	Glu	Lys	Pro	Tyr	Thr	Cys	Glu	Lys	Cys	Gly	Lys	Ala	Phe
			340					345					350		
Asn	Gln	Ser	Ser	Ser	Leu	Ile	Ile	His	Arg	Ser	Ile	His	Ser	Glu	Gln
	355						360					365			
Lys	Leu	Tyr	Lys	Cys	Glu	Glu	Cys	Gly	Lys	Ala	Phe	Thr	Trp	Ser	Ser
	370					375					380				
Ser	Leu	Asn	Lys	His	Lys	Arg	Ile	His	Thr	Gly	Glu	Lys	Pro	Tyr	Thr
385					390					395					400
Cys	Glu	Glu	Cys	Gly	Lys	Ala	Phe	Tyr	Arg	Ser	Ser	His	Leu	Ala	Lys
				405					410					415	
His	Lys	Arg	Ile	His	Thr	Gly	Glu	Lys	Pro	Tyr	Thr	Cys	Glu	Glu	Cys
			420					425					430		
Gly	Lys	Ala	Phe	Asn	Gln	Ser	Ser	Thr	Leu	Ile	Leu	His	Lys	Arg	Ile
	435						440					445			
His	Ser	Gly	Gln	Lys	Pro	Tyr	Lys	Cys	Glu	Glu	Cys	Gly	Lys	Ala	Phe
	450					455					460				
Thr	Arg	Ser	Thr	Thr	Leu	Asn	Glu	His	Lys	Lys	Ile	His	Thr	Gly	Glu
465					470					475					480
Lys	Pro	Tyr	Lys	Cys	Glu	Glu	Cys	Gly	Lys	Ala	Phe	Ile	Trp	Ser	Ala
				485					490					495	
Ser	Leu	Asn	Glu	His	Lys	Asn	Ile	His	Thr	Gly	Glu	Lys	Pro	Tyr	Lys
			500					505					510		
Cys	Lys	Glu	Cys	Gly	Lys	Ala	Phe	Asn	Gln	Ser	Ser	Gly	Leu	Ile	Ile
	515						520					525			
His	Arg	Ser	Ile	His	Ser	Glu	Gln	Lys	Leu	Tyr	Lys	Cys	Glu	Glu	Cys
	530					535					540				

Gly	Lys	Ala	Phe	Thr	Arg	Ser	Thr	Ala	Leu	Asn	Glu	His	Lys	Lys	Ile
545					550					555					560
His	Ser	Gly	Glu	Lys	Pro	Tyr	Lys	Cys	Lys	Glu	Cys	Gly	Lys	Ala	Tyr
				565						570					575
Asn	Leu	Ser	Ser	Thr	Leu	Thr	Lys	His	Lys	Arg	Ile	His	Thr	Gly	Glu
			580					585					590		
Lys	Pro	Phe	Thr	Cys	Glu	Glu	Cys	Gly	Lys	Ala	Phe	Asn	Trp	Ser	Ser
		595					600					605			
Ser	Leu	Thr	Lys	His	Lys	Ile	Ile	His	Thr	Gly	Glu	Lys	Ser	Tyr	Lys
	610					615					620				
Cys	Glu	Glu	Cys	Gly	Lys	Gly	Phe	Asn	Arg	Pro	Ser	Thr	Leu	Thr	Val
625					630					635					640
His	Lys	Arg	Phe	Ile	Leu	Ala	Arg	Asn	Ile	Val	Glu	*			
				645					650		652				

<210> 1834

<211> 469

<212> PRT

<213> Homo sapiens

<400> 1834

Met	Asp	Leu	Thr	Lys	Gly	Cys	Val	Thr	Phe	Glu	Asp	Ile	Ala	Ile	Tyr
1				5					10					15	
Phe	Ser	Gln	Asp	Glu	Trp	Gly	Leu	Leu	Asp	Glu	Ala	Gln	Arg	Leu	Leu
			20					25					30		
Tyr	Leu	Glu	Val	Met	Leu	Glu	Asn	Phe	Ala	Leu	Val	Ala	Ser	Leu	Gly
		35					40					45			
Cys	Gly	His	Gly	Thr	Glu	Asp	Glu	Glu	Thr	Pro	Ser	Asp	Gln	Asn	Val
	50					55					60				
Ser	Val	Gly	Val	Ser	Gln	Ser	Lys	Ala	Gly	Ser	Ser	Thr	Gln	Lys	Thr
	65				70					75					80
Gln	Ser	Cys	Glu	Met	Cys	Val	Pro	Val	Leu	Lys	Asp	Ile	Leu	His	Leu
			85						90					95	
Ala	Asp	Leu	Pro	Gly	Gln	Lys	Pro	Tyr	Leu	Val	Gly	Glu	Cys	Thr	Asn
			100					105					110		
His	His	Gln	His	Gln	Lys	His	His	Ser	Ala	Lys	Lys	Ser	Leu	Lys	Arg
		115					120					125			
Asp	Met	Asp	Arg	Ala	Ser	Tyr	Val	Lys	Cys	Cys	Leu	Phe	Cys	Met	Ser
	130					135					140				
Leu	Lys	Pro	Phe	Arg	Lys	Trp	Glu	Val	Gly	Lys	Asp	Leu	Pro	Ala	Met
	145				150				155					160	
Leu	Arg	Leu	Leu	Arg	Ser	Leu	Val	Phe	Pro	Gly	Gly	Lys	Lys	Pro	Gly
			165					170						175	
Thr	Ile	Thr	Glu	Cys	Gly	Glu	Asp	Ile	Arg	Ser	Gln	Lys	Ser	His	Tyr
		180					185						190		
Lys	Ser	Gly	Glu	Cys	Gly	Lys	Ala	Ser	Arg	His	Lys	His	Thr	Pro	Val
	195					200					205				
Tyr	His	Pro	Arg	Val	Tyr	Thr	Gly	Lys	Lys	Leu	Tyr	Glu	Cys	Ser	Lys
	210					215					220				
Cys	Gly	Lys	Ala	Phe	Arg	Gly	Lys	Tyr	Ser	Leu	Val	Gln	His	Gln	Arg
	225				230					235					240
Val	His	Thr	Gly	Glu	Arg	Pro	Trp	Glu	Cys	Asn	Glu	Cys	Gly	Lys	Phe
			245					250						255	
Phe	Ser	Gln	Thr	Ser	His	Leu	Asn	Asp	His	Arg	Arg	Ile	His	Thr	Gly
			260					265					270		
Glu	Arg	Pro	Tyr	Glu	Cys	Ser	Glu	Cys	Gly	Lys	Leu	Phe	Arg	Gln	Asn
	275						280					285			
Ser	Ser	Leu	Val	Asp	His	Gln	Lys	Ile	His	Thr	Gly	Ala	Arg	Pro	Tyr
	290					295					300				
Glu	Cys	Ser	Gln	Cys	Gly	Lys	Ser	Phe	Ser	Gln	Lys	Ala	Thr	Leu	Val
305					310					315					320


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<210> 1835
<211> 122
<212> PRT
<213> Homo sapiens
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<210> 1836
<211> 626
<212> PRT
<213> Homo sapiens
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3738

Gly	Gln	Ala	Leu	Ser	Thr	Tyr	Gln	Arg	Leu	Tyr	Ser	Glu	Ser	Ile	Leu
65					70					75					80
Thr	Thr	Met	Val	Gln	Val	Ala	Gly	Lys	Val	Gln	Glu	Val	Leu	Lys	Glu
			85						90					95	
Pro	Asp	Gly	Gly	Leu	Val	Val	Leu	Ser	Gly	Gly	Gly	Thr	Ser	Gly	Arg
		100						105					110		
Met	Ala	Phe	Leu	Met	Ser	Val	Ser	Phe	Asn	Gln	Leu	Met	Lys	Gly	Leu
	115						120					125			
Gly	Gln	Lys	Pro	Leu	Tyr	Thr	Tyr	Leu	Ile	Ala	Gly	Gly	Asp	Arg	Ser
	130					135					140				
Val	Val	Ala	Ser	Arg	Glu	Gly	Thr	Glu	Asp	Ser	Ala	Leu	His	Gly	Ile
145					150					155					160
Glu	Glu	Leu	Lys	Lys	Val	Ala	Ala	Gly	Lys	Lys	Arg	Val	Ile	Val	Ile
			165					170						175	
Gly	Ile	Ser	Val	Gly	Leu	Ser	Ala	Pro	Phe	Val	Ala	Gly	Gln	Met	Asp
		180						185					190		
Cys	Cys	Met	Asn	Asn	Thr	Ala	Val	Phe	Leu	Pro	Val	Leu	Val	Gly	Phe
	195						200					205			
Asn	Pro	Val	Ser	Met	Ala	Arg	Asn	Asp	Pro	Ile	Glu	Asp	Trp	Ser	Ser
	210					215					220				
Thr	Phe	Arg	Gln	Val	Ala	Glu	Arg	Met	Gln	Lys	Met	Gln	Glu	Lys	Gln
225					230					235					240
Lys	Ala	Phe	Val	Leu	Asn	Pro	Ala	Ile	Gly	Pro	Glu	Gly	Leu	Ser	Gly
			245						250					255	
Ser	Ser	Arg	Met	Lys	Gly	Gly	Ser	Ala	Thr	Lys	Ile	Leu	Leu	Glu	Thr
		260						265					270		
Leu	Leu	Leu	Ala	Ala	His	Lys	Thr	Val	Asp	Gln	Gly	Ile	Ala	Ala	Ser
	275						280					285			
Gln	Arg	Cys	Leu	Leu	Glu	Ile	Leu	Arg	Thr	Phe	Glu	Arg	Ala	His	Gln
	290					295					300				
Val	Thr	Tyr	Ser	Gln	Ser	Pro	Lys	Ile	Ala	Thr	Leu	Met	Lys	Ser	Val
305					310					315					320
Ser	Thr	Ser	Leu	Glu	Lys	Lys	Gly	His	Val	Tyr	Leu	Val	Gly	Trp	Gln
			325						330					335	
Thr	Leu	Gly	Ile	Ile	Ala	Ile	Met	Asp	Gly	Val	Glu	Cys	Ile	His	Thr
		340						345					350		
Phe	Gly	Ala	Asp	Phe	Arg	Asp	Val	Arg	Gly	Phe	Leu	Ile	Gly	Asp	His
	355						360					365			
Ser	Asp	Met	Phe	Asn	Gln	Lys	Ala	Glu	Leu	Thr	Asn	Gln	Gly	Pro	Gln
	370					375					380				
Phe	Thr	Phe	Ser	Gln	Glu	Asp	Phe	Leu	Thr	Ser	Ile	Leu	Pro	Ser	Leu
385					390					395					400
Thr	Glu	Ile	Asp	Thr	Val	Val	Phe	Ile	Phe	Thr	Leu	Asp	Asp	Asn	Leu
			405						410					415	
Thr	Glu	Val	Gln	Thr	Ile	Val	Glu	Gln	Val	Lys	Glu	Lys	Thr	Asn	His
		420						425					430		
Ile	Gln	Ala	Leu	Ala	His	Ser	Thr	Val	Gly	Gln	Thr	Leu	Leu	Ile	Pro
	435						440					445			
Leu	Lys	Lys	Leu	Phe	Pro	Ser	Ile	Ile	Ser	Ile	Thr	Trp	Pro	Leu	Leu
	450					455					460				
Phe	Phe	Glu	Tyr	Glu	Gly	Asn	Phe	Ile	Gln	Lys	Phe	Gln	Arg	Glu	Leu
465					470				475						480
Ser	Thr	Lys	Trp	Val	Leu	Asn	Thr	Val	Ser	Thr	Gly	Ala	His	Val	Leu
			485						490					495	
Leu	Gly	Lys	Ile	Leu	Gln	Asn	His	Met	Leu	Asp	Leu	Arg	Ile	Ser	Asn
		500						505					510		
Ser	Lys	Leu	Phe	Trp	Arg	Ala	Leu	Ala	Met	Leu	Gln	Arg	Phe	Ser	Gly
	515						520					525			
Gln	Ser	Lys	Ala	Arg	Cys	Ile	Glu	Ser	Leu	Leu	Arg	Ala	Ile	His	Phe
	530					535					540				
Pro	Gln	Pro	Leu	Ser	Asp	Asp	Ile	Arg	Ala	Ala	Pro	Ile	Ser	Cys	Arg
545					550					555					560
Val	Gln	Val	Ala	His	Glu	Lys	Glu	Gln	Val	Ile	Pro	Ile	Ala	Leu	Leu
				565					570					575	

Ser Leu Leu Phe Arg Cys Ser Ile Thr Glu Ala Gln Ala His Leu Ala
 580 585 590
 Ala Ala Pro Ser Val Cys Glu Ala Val Arg Ser Ala Leu Ala Gly Pro
 595 600 605
 Gly Gln Lys Arg Thr Ala Asp Pro Leu Glu Ile Leu Glu Pro Asp Val
 610 615 620
 Gln *
 625

<210> 1837
 <211> 376
 <212> PRT
 <213> Homo sapiens

<400> 1837
 Met Ala Ser Asp Pro His Ser Leu Glu Glu Phe Cys Ser Asp Pro His
 1 5 10 15
 Ala Val Ala Gly Ala Leu Lys Ser Tyr Leu Arg Glu Leu Pro Glu Pro
 20 25 30
 Leu Met Thr Phe Asp Leu Tyr Asp Asp Trp Met Arg Ala Ala Ser Leu
 35 40 45
 Lys Glu Pro Gly Ala Arg Leu Gln Ala Leu Gln Glu Val Cys Ser Arg
 50 55 60
 Leu Pro Pro Glu Asn Leu Ser Asn Leu Arg Tyr Leu Met Lys Phe Leu
 65 70 75 80
 Ala Arg Leu Ala Glu Glu Gln Glu Val Asn Lys Met Thr Pro Ser Asn
 85 90 95
 Ile Ala Ile Val Leu Gly Pro Asn Leu Leu Trp Pro Pro Glu Lys Glu
 100 105 110
 Gly Asp Gln Ala Gln Leu Asp Ala Ala Ser Val Ser Ser Ile Gln Val
 115 120 125
 Val Gly Val Val Glu Ala Leu Ile Gln Ser Ala Asp Thr Leu Phe Pro
 130 135 140
 Gly Asp Ile Asn Phe Asn Val Ser Gly Leu Phe Ser Ala Val Thr Leu
 145 150 155 160
 Gln Asp Thr Val Ser Asp Arg Leu Ala Ser Glu Glu Leu Pro Ser Thr
 165 170 175
 Ala Val Pro Thr Pro Ala Thr Thr Pro Ala Pro Ala Pro Ala Pro Ala
 180 185 190
 Pro Ala Pro Ala Pro Ala Leu Ala Ser Ala Ala Thr Lys Glu Arg Thr
 195 200 205
 Glu Ser Glu Val Pro Pro Arg Pro Ala Ser Pro Lys Val Thr Arg Ser
 210 215 220
 Pro Pro Glu Thr Ala Ala Pro Val Glu Asp Met Ala Arg Arg Thr Lys
 225 230 235 240
 Arg Pro Ala Pro Ala Arg Pro Thr Met Pro Pro Pro Gln Val Ser Gly
 245 250 255
 Ser Arg Ser Ser Pro Pro Ala Pro Pro Leu Pro Pro Gly Ser Gly Ser
 260 265 270
 Pro Gly Thr Pro Gln Ala Leu Pro Arg Arg Leu Val Gly Ser Ser Leu
 275 280 285
 Arg Ala Pro Thr Val Pro Pro Pro Leu Pro Pro Thr Pro Pro Gln Pro
 290 295 300
 Ala Arg Arg Gln Ser Arg Arg Ser Pro Ala Ser Pro Ser Pro Ala Ser
 305 310 315 320
 Pro Gly Pro Ala Ser Pro Ser Pro Val Ser Leu Ser Asn Pro Ala Gln
 325 330 335
 Val Asp Leu Gly Ala Ala Thr Ala Glu Gly Gly Ala Pro Glu Ala Ile
 340 345 350
 Ser Gly Val Pro Thr Pro Pro Ala Ile Pro Pro Gln Pro Arg Pro Arg
 355 360 365

Ser Leu Ala Ser Glu Thr Asn *
370 375

<210> 1838
<211> 320
<212> PRT
<213> Homo sapiens

<400> 1838
Met Thr Ser Ile Pro Phe Pro Gly Asp Arg Leu Leu Gln Val Asp Gly
1 5 10 15
Val Ile Leu Cys Gly Leu Thr His Lys Gln Ala Val Gln Cys Leu Lys
20 25 30
Gly Pro Gly Gln Val Ala Arg Leu Val Leu Glu Arg Arg Val Pro Arg
35 40 45
Ser Thr Gln Gln Cys Pro Ser Ala Asn Asp Ser Met Gly Asp Glu Arg
50 55 60
Thr Ala Val Ser Leu Val Thr Ala Leu Pro Gly Arg Pro Ser Ser Cys
65 70 75 80
Val Ser Val Thr Asp Gly Pro Lys Phe Glu Val Lys Leu Lys Lys Asn
85 90 95
Ala Asn Gly Leu Gly Phe Ser Phe Val Gln Met Glu Lys Glu Ser Cys
100 105 110
Ser His Leu Lys Ser Asp Leu Val Arg Ile Lys Arg Leu Phe Pro Gly
115 120 125
Gln Pro Ala Glu Glu Asn Gly Ala Ile Ala Ala Gly Asp Ile Ile Leu
130 135 140
Ala Val Asn Gly Arg Ser Thr Glu Gly Leu Ile Phe Gln Glu Val Leu
145 150 155 160
His Leu Leu Arg Gly Ala Pro Gln Glu Val Thr Leu Leu Leu Cys Arg
165 170 175
Pro Pro Pro Gly Ala Leu Pro Glu Met Glu Gln Glu Trp Gln Thr Pro
180 185 190
Glu Leu Ser Ala Asp Lys Glu Phe Thr Arg Ala Thr Cys Thr Asp Ser
195 200 205
Cys Thr Ser Pro Ile Leu Asp Gln Glu Asp Ser Trp Arg Asp Ser Ala
210 215 220
Ser Pro Asp Ala Gly Glu Gly Leu Gly Leu Arg Pro Glu Ser Ser Gln
225 230 235 240
Lys Ala Ile Arg Glu Ala Gln Trp Gly Gln Asn Arg Glu Arg Pro Trp
245 250 255
Ala Ser Ser Leu Thr His Ser Pro Glu Ser His Pro His Leu Cys Lys
260 265 270
Leu His Gln Glu Arg Asp Glu Ser Thr Leu Ala Thr Ser Leu Glu Lys
275 280 285
Asp Val Arg Gln Asn Cys Tyr Ser Val Cys Asp Ile Met Arg Leu Gly
290 295 300
Arg Tyr Ser Phe Ser Ser Pro Leu Thr Arg Leu Ser Thr Asp Ile Phe
305 310 315 320

<210> 1839
<211> 113
<212> PRT
<213> Homo sapiens

<400> 1839

Met Leu Ser Asn Glu Asp Val Val Arg Leu Val Val Gly His Leu Ala
 1 5 10 15
 Glu Ala Asp Trp His Lys Thr Asp Leu Ala Gln Arg Pro Ala Asn Leu
 20 25 30
 Gly Leu Met Gln Ser Leu Leu Leu Gln Arg Lys Ala Ser Gly Leu His
 35 40 45
 Glu Ala Asp Gln Asn Ala Ala Thr Arg Leu Ile Arg His Ala Ile Gly
 50 55 60
 Asn Asn Glu Tyr Gly Glu Met Glu Ala Glu Arg Leu Ala Ala Met Leu
 65 70 75 80
 Thr Leu Pro Glu Asp Leu Ala Arg Met Tyr Arg Asp Asp Ile Thr Val
 85 90 95
 Thr Val Val Tyr Phe Asn Ser Glu Ser Ile Gly Ala Tyr Tyr Lys Gly
 100 105 110
 Gly
 113

<210> 1840
 <211> 701
 <212> PRT
 <213> Homo sapiens

<400> 1840
 Met Ala Ser Thr Val Glu Gly Gly Asp Thr Ala Leu Leu Pro Glu Phe
 1 5 10 15
 Pro Arg Gly Pro Leu Asp Ala Tyr Arg Ala Arg Ala Ser Phe Ser Trp
 20 25 30
 Lys Glu Leu Ala Leu Phe Thr Glu Gly Glu Gly Met Leu Arg Phe Lys
 35 40 45
 Lys Thr Ile Phe Ser Ala Leu Glu Asn Asp Pro Leu Phe Ala Arg Ser
 50 55 60
 Pro Gly Ala Asp Leu Ser Leu Glu Lys Tyr Arg Glu Leu Asn Phe Leu
 65 70 75 80
 Arg Cys Lys Arg Ile Phe Glu Tyr Asp Phe Leu Ser Val Glu Asp Met
 85 90 95
 Phe Lys Ser Pro Leu Lys Val Pro Ala Leu Ile Gln Cys Leu Gly Met
 100 105 110
 Tyr Asp Ser Ser Leu Ala Ala Lys Tyr Leu Leu His Ser Leu Val Phe
 115 120 125
 Gly Ser Ala Val Tyr Ser Ser Gly Ser Glu Arg His Leu Thr Tyr Ile
 130 135 140
 Gln Lys Ile Phe Arg Met Glu Ile Phe Gly Cys Phe Ala Leu Thr Glu
 145 150 155 160
 Leu Ser His Gly Ser Asn Thr Lys Ala Ile Arg Thr Thr Ala His Tyr
 165 170 175
 Asp Pro Ala Thr Glu Glu Phe Ile Ile His Ser Pro Asp Phe Glu Ala
 180 185 190
 Ala Lys Phe Trp Val Gly Asn Met Gly Lys Thr Ala Thr His Ala Val
 195 200 205
 Val Phe Ala Lys Leu Cys Val Pro Gly Asp Gln Cys His Gly Leu His
 210 215 220
 Pro Phe Ile Val Gln Ile Arg Asp Pro Lys Thr Leu Leu Pro Met Pro
 225 230 235 240
 Gly Val Met Val Gly Asp Ile Gly Lys Lys Leu Gly Gln Asn Gly Leu
 245 250 255
 Asp Asn Gly Phe Ala Met Phe His Lys Val Arg Val Pro Arg Gln Ser
 260 265 270
 Leu Leu Asn Arg Met Gly Asp Val Thr Pro Glu Gly Thr Tyr Val Ser
 275 280 285
 Pro Phe Lys Asp Val Arg Gln Arg Phe Gly Ala Ser Leu Gly Ser Leu
 290 295 300

Ser Ser Gly Arg Val Ser Ile Val Ser Leu Ala Ile Leu Asn Leu Lys
 305 310 315 320
 Leu Ala Val Ala Ile Ala Leu Arg Phe Ser Ala Thr Arg Arg Gln Phe
 325 330 335
 Gly Pro Thr Glu Glu Glu Ile Pro Val Leu Glu Tyr Pro Met Gln
 340 345 350
 Gln Trp Arg Leu Leu Pro Tyr Leu Ala Ala Val Tyr Ala Leu Asp His
 355 360 365
 Phe Ser Lys Ser Leu Phe Leu Asp Leu Val Glu Leu Gln Arg Gly Leu
 370 375 380
 Ala Ser Gly Asp Arg Ser Ala Arg Gln Ala Glu Leu Gly Arg Glu Ile
 385 390 395 400
 His Ala Leu Ala Ser Ala Ser Lys Pro Leu Ala Ser Trp Thr Thr Gln
 405 410 415
 Gln Gly Ile Gln Glu Cys Arg Glu Ala Cys Gly Gly His Gly Tyr Leu
 420 425 430
 Ala Met Asn Arg Leu Gly Val Leu Arg Asp Asp Asn Asp Pro Asn Cys
 435 440 445
 Thr Tyr Glu Gly Asp Asn Asn Ile Leu Leu Gln Gln Thr Ser Asn Tyr
 450 455 460
 Leu Leu Gly Leu Leu Ala His Gln Val His Asp Gly Ala Cys Phe Arg
 465 470 475 480
 Ser Pro Leu Lys Ser Val Asp Phe Leu Asp Ala Tyr Pro Gly Ile Leu
 485 490 495
 Asp Gln Lys Phe Glu Val Ser Ser Val Ala Asp Cys Leu Asp Ser Ala
 500 505 510
 Val Ala Leu Ala Ala Tyr Lys Trp Leu Val Cys Tyr Leu Leu Arg Glu
 515 520 525
 Thr Tyr Gln Lys Leu Asn Gln Glu Lys Arg Ser Gly Ser Ser Asp Phe
 530 535 540
 Glu Ala Arg Asn Lys Cys Gln Val Ser His Gly Arg Pro Leu Ala Leu
 545 550 555 560
 Ala Phe Val Asp Leu Thr Val Val Gln Arg Phe His Glu His Val His
 565 570 575
 Gln Pro Ser Val Pro Pro Ser Leu Arg Ala Val Leu Gly Arg Leu Ser
 580 585 590
 Ala Leu Tyr Ala Leu Trp Ser Leu Ser Arg His Ala Ala Leu Leu Tyr
 595 600 605
 Arg Gly Gly Tyr Phe Ser Gly Glu Gln Ala Gly Glu Val Leu Glu Ser
 610 615 620
 Ala Val Leu Ala Leu Cys Ser Gln Leu Lys Asp Asp Ala Val Ala Leu
 625 630 635 640
 Val Asp Val Ile Ala Pro Pro Asp Phe Val Leu Asp Ser Pro Ile Gly
 645 650 655
 Arg Ala Asp Gly Glu Leu Tyr Lys Asn Leu Trp Gly Ala Val Leu Gln
 660 665 670
 Glu Ser Lys Val Leu Glu Arg Ala Ser Trp Trp Pro Glu Phe Ser Val
 675 680 685
 Asn Lys Pro Val Ile Gly Ser Leu Lys Ser Lys Leu *
 690 695 700

<210> 1841

<211> 234

<212> PRT

<213> Homo sapiens

<400> 1841

Met Glu Arg Val Gly Cys Thr Leu Thr Thr Thr Tyr Ala His Pro Arg
 1 5 10 15
 Pro Thr Pro Thr Asn Phe Leu Pro Ala Ile Ser Thr Met Ala Ser Ser
 20 25 30


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Tyr Arg Asp Arg Phe Pro His Ser Asn Leu Thr His Ser Leu Ser Leu
   35                               40                               45
Pro Trp Arg Pro Ser Thr Tyr Tyr Lys Val Ala Ser Asn Ser Pro Ser
   50                               55                               60
Val Ala Pro Tyr Cys Thr Arg Ser Gln Arg Val Ser Glu Asn Thr Met
   65                               70                               75                               80
Leu Pro Phe Val Ser Asn Arg Thr Thr Phe Phe Thr Arg Tyr Thr Pro
                               85                               90                               95
Asp Asp Trp Tyr Arg Ser Asn Leu Thr Asn Tyr Gln Glu Ser Asn Thr
   100                               105                               110
Ser Arg His Asn Ser Glu Lys Leu Arg Val Asp Thr Ser Arg Leu Ile
   115                               120                               125
Gln Asp Lys Tyr Gln Gln Thr Arg Lys Thr Gln Ala Asp Thr Thr Gln
   130                               135                               140
Asn Leu Gly Glu Arg Val Asn Asp Ile Gly Phe Trp Lys Ser Glu Ile
   145                               150                               155                               160
Ile His Glu Leu Asp Glu Met Ile Gly Glu Thr Asn Ala Leu Thr Asp
                               165                               170                               175
Val Lys Lys Arg Leu Glu Arg Ala Leu Met Glu Thr Glu Ala Pro Leu
                               180                               185                               190
Gln Val Ala Arg Glu Cys Leu Phe His Arg Glu Lys Arg Met Gly Ile
   195                               200                               205
Asp Leu Val His Asp Glu Val Glu Ala Gln Leu Leu Thr Val Asn Val
   210                               215                               220
Gly Glu Met His Gln Ser Gln Ala Ala *
   225                               230                               233

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<210> 1842
<211> 192
<212> PRT
<213> Homo sapiens

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```

<400> 1842
Met Gly Lys Thr Asn Ser Lys Leu Ala Pro Glu Val Leu Glu Asp Leu
   1                               5                               10                               15
Val Gln Asn Thr Glu Phe Ser Glu Gln Glu Leu Lys Gln Trp Tyr Lys
   20                               25                               30
Gly Phe Leu Lys Asp Cys Pro Ser Gly Ile Leu Asn Leu Glu Glu Phe
   35                               40                               45
Gln Gln Leu Tyr Ile Lys Phe Phe Pro Tyr Gly Asp Ala Ser Lys Phe
   50                               55                               60
Ala Gln His Ala Phe Arg Thr Phe Asp Lys Asn Gly Asp Gly Thr Ile
   65                               70                               75                               80
Asp Phe Arg Glu Phe Ile Cys Ala Leu Ser Val Thr Ser Arg Gly Ser
   85                               90                               95
Phe Glu Gln Lys Leu Asn Trp Ala Phe Glu Met Tyr Asp Leu Asp Gly
   100                               105                               110
Asp Gly Arg Ile Thr Arg Leu Glu Met Leu Glu Ile Ile Glu Ala Ile
   115                               120                               125
Tyr Lys Met Val Gly Thr Val Ile Met Met Arg Met Asn Gln Asp Gly
   130                               135                               140
Leu Thr Pro Gln Gln Arg Val Asp Lys Ile Phe Lys Lys Met Asp Gln
   145                               150                               155                               160
Asp Lys Asp Asp Gln Ile Thr Leu Glu Glu Phe Lys Glu Ala Ala Lys
   165                               170                               175
Ser Asp Pro Ser Ile Val Leu Leu Leu Gln Cys Asp Met Gln Lys *
   180                               185                               190                               191

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<210> 1843

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<211> 339
 <212> PRT
 <213> Homo sapiens

<400> 1843
 Met Ala Lys Trp Gly Glu Gly Asp Pro Arg Trp Ile Val Glu Glu Arg,
 1 5 10 15
 Ala Asp Ala Thr Asn Val Asn Asn Trp His Trp Thr Glu Arg Asp Ala
 20 25 30
 Ser Asn Trp Ser Thr Asp Lys Leu Lys Thr Leu Phe Leu Ala Val Gln
 35 40 45
 Val Gln Asn Glu Glu Gly Lys Cys Glu Val Thr Glu Val Ser Lys Leu
 50 55 60
 Asp Gly Glu Ala Ser Ile Asn Asn Arg Lys Gly Lys Leu Ile Phe Phe
 65 70 75 80
 Tyr Glu Trp Ser Val Lys Leu Asn Trp Thr Gly Thr Ser Lys Ser Gly
 85 90 95
 Val Gln Tyr Lys Gly His Val Glu Ile Pro Asn Leu Ser Asp Glu Asn
 100 105 110
 Ser Val Asp Glu Val Glu Ile Ser Val Ser Leu Ala Lys Asp Glu Pro
 115 120 125
 Asp Thr Asn Leu Val Ala Leu Met Lys Glu Glu Gly Val Lys Leu Leu
 130 135 140
 Arg Glu Ala Met Gly Ile Tyr Ile Ser Thr Leu Lys Thr Glu Phe Thr
 145 150 155 160
 Gln Gly Met Ile Leu Pro Thr Met Asn Gly Glu Ser Val Asp Pro Val
 165 170 175
 Gly Gln Pro Ala Leu Lys Thr Glu Glu Arg Lys Ala Lys Pro Ala Pro
 180 185 190
 Ser Lys Thr Gln Ala Arg Pro Val Gly Val Lys Ile Pro Thr Cys Lys
 195 200 205
 Ile Thr Leu Lys Glu Thr Phe Leu Thr Ser Pro Glu Glu Leu Tyr Arg
 210 215 220
 Val Phe Thr Thr Gln Glu Leu Val Gln Ala Phe Thr His Ala Pro Ala
 225 230 235 240
 Thr Leu Glu Ala Asp Arg Gly Gly Lys Phe His Met Val Asp Gly Asn
 245 250 255
 Val Ser Gly Glu Phe Thr Asp Leu Val Pro Glu Lys His Ile Val Met
 260 265 270
 Lys Trp Arg Phe Lys Ser Trp Pro Glu Gly His Phe Ala Thr Ile Thr
 275 280 285
 Leu Thr Phe Ile Asp Lys Asn Gly Glu Thr Glu Leu Cys Met Glu Gly
 290 295 300
 Arg Gly Ile Pro Ala Pro Glu Glu Glu Arg Thr Arg Gln Gly Trp Gln
 305 310 315 320
 Arg Tyr Tyr Phe Glu Gly Ile Lys Gln Thr Phe Gly Tyr Gly Ala Arg
 325 330 335
 Leu Phe *
 338

<210> 1844
 <211> 311
 <212> PRT
 <213> Homo sapiens

<400> 1844
 Met Ser Tyr Leu Lys Gln Pro Pro Tyr Ala Val Asn Gly Leu Ser Leu
 1 5 10 15
 Thr Thr Ser Gly Met Asp Leu Leu His Pro Ser Val Gly Tyr Pro Gly
 20 25 30


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Leu Pro Ser Glu Glu Ala Val Pro Gly His Leu Leu Thr Lys Gln Arg
   35           40           45
Thr Gly Val Gly Lys Thr Thr Pro Arg Lys Gln Arg Arg Glu Arg Thr
   50           55           60
Thr Phe Thr Arg Ala Gln Leu Asp Val Leu Glu Ala Leu Phe Ala Lys
   65           70           75           80
Thr Arg Tyr Pro Asp Ile Phe Met Arg Glu Glu Val Ala Leu Lys Ile
           85           90           95
Asn Leu Pro Glu Ser Arg Val Gln Val Trp Phe Lys Asn Arg Arg Ala
           100          105          110
Lys Cys Arg Gln Gln Gln Gln Gln Gln Asn Gly Gly Gln Asn Lys
           115          120          125
Val Arg Pro Ala Lys Lys Lys Thr Ser Pro Ala Arg Glu Val Ser Ser
           130          135          140
Glu Ser Gly Thr Ser Gly Gln Phe Thr Pro Pro Ser Ser Thr Ser Val
           145          150          155          160
Pro Thr Ile Ala Ser Ser Ser Ala Pro Val Ser Ile Trp Ser Pro Ala
           165          170          175
Ser Ile Ser Pro Leu Ser Asp Pro Leu Ser Thr Ser Ser Ser Cys Met
           180          185          190
Gln Arg Ser Tyr Pro Met Thr Tyr Thr Gln Ala Ser Gly Tyr Ser Gln
           195          200          205
Gly Tyr Ala Gly Ser Thr Ser Tyr Phe Gly Gly Met Asp Cys Gly Ser
           210          215          220
Tyr Leu Thr Pro Met His His Gln Leu Pro Gly Pro Gly Ala Thr Leu
           225          230          235          240
Ser Pro Met Gly Thr Asn Ala Val Thr Ser His Leu Asn Gln Ser Pro
           245          250          255
Ala Ser Leu Ser Thr Gln Gly Tyr Gly Ala Ser Ser Leu Gly Phe Asn
           260          265          270
Ser Thr Thr Asp Cys Leu Asp Tyr Lys Asp Gln Thr Ala Ser Trp Lys
           275          280          285
Leu Asn Phe Asn Ala Asp Cys Leu Asp Tyr Lys Asp Gln Thr Ser Ser
           290          295          300
Trp Lys Phe Gln Val Leu *
           305          310

```

<210> 1845
 <211> 455
 <212> PRT
 <213> Homo sapiens

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<400> 1845
Met Ala Gln Arg Asp Trp Thr Trp Val Pro Ser Gly Ala Ala Ala Met
   1           5           10           15
Gly Leu Gly Val Ser Ala Glu Gln Pro Ala Gly Gly Ala Glu Gly Phe
           20           25           30
His Leu His Gly Val Gln Glu Asn Ser Pro Ala Gln Gln Ala Gly Leu
           35           40           45
Glu Pro Tyr Phe Asp Phe Ile Ile Thr Ile Gly His Ser Arg Leu Asn
           50           55           60
Lys Glu Asn Asp Thr Leu Lys Ala Leu Leu Lys Ala Asn Val Glu Lys
           65           70           75           80
Pro Val Lys Leu Glu Val Phe Asn Met Lys Thr Met Arg Val Arg Glu
           85           90           95
Val Glu Val Val Pro Ser Asn Met Trp Gly Gly Gln Gly Leu Leu Gly
           100          105          110
Ala Ser Val Arg Phe Cys Ser Phe Arg Arg Ala Ser Glu Gln Val Trp
           115          120          125
His Val Leu Asp Val Glu Pro Ser Ser Pro Ala Ala Leu Ala Gly Leu
           130          135          140

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Arg Pro Tyr Thr Asp Tyr Val Val Gly Ser Asp Gln Ile Leu Gln Glu
145                               150                               155                               160
Ser Glu Asp Phe Phe Thr Leu Ile Glu Ser His Glu Gly Lys Pro Leu
                               165                               170                               175
Lys Leu Met Val Tyr Asn Ser Lys Ser Asp Ser Cys Arg Glu Val Thr
                               180                               185                               190
Val Thr Pro Asn Ala Ala Trp Gly Gly Glu Gly Ser Leu Gly Cys Gly
                               195                               200                               205
Ile Gly Tyr Gly Tyr Leu His Arg Ile Pro Thr Gln Pro Pro Ser Tyr
                               210                               215                               220
His Lys Lys Pro Pro Gly Thr Pro Pro Pro Ser Ala Leu Pro Leu Gly
225                               230                               235                               240
Ala Pro Pro Pro Asp Ala Leu Pro Pro Gly Pro Thr Pro Glu Asp Ser
                               245                               250                               255
Pro Ser Leu Glu Thr Gly Ser Arg Gln Ser Asp Tyr Met Glu Ala Leu
                               260                               265                               270
Leu Gln Ala Pro Gly Ser Ser Met Glu Asp Pro Leu Pro Gly Pro Gly
                               275                               280                               285
Ser Pro Ser His Ser Ala Pro Asp Pro Asp Gly Leu Pro His Phe Met
                               290                               295                               300
Glu Thr Pro Leu Gln Pro Pro Pro Pro Val Gln Arg Val Met Asp Pro
305                               310                               315                               320
Gly Phe Leu Asp Val Ser Gly Ile Ser Leu Leu Asp Asn Ser Asn Ala
                               325                               330                               335
Ser Val Trp Pro Ser Leu Pro Ser Ser Thr Glu Leu Thr Thr Thr Ala
                               340                               345                               350
Val Ser Thr Ser Gly Pro Glu Asp Ile Cys Ser Ser Ser Ser Ser His
                               355                               360                               365
Glu Arg Gly Gly Glu Ala Thr Trp Ser Gly Ser Glu Phe Glu Val Ser
                               370                               375                               380
Phe Leu Asp Ser Pro Gly Ala Gln Ala Gln Ala Asp His Leu Pro Gln
385                               390                               395                               400
Leu Thr Leu Pro Asp Ser Leu Thr Ser Ala Ala Ser Pro Glu Asp Gly
                               405                               410                               415
Leu Ser Ala Glu Leu Leu Glu Ala Gln Ala Glu Glu Glu Pro Ala Ser
                               420                               425                               430
Thr Glu Gly Leu Asp Thr Gly Thr Glu Ala Glu Gly Leu Asp Ser Gln
                               435                               440                               445
Ala Gln Ile Ser Thr Thr Glu
450                               455

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<210> 1846

<211> 250

<212> PRT

<213> Homo sapiens

<400> 1846

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Met Ala Glu Arg Gly Glu Leu Asp Leu Thr Gly Ala Lys Gln Asn Thr
1                               5                               10                               15
Gly Val Trp Leu Val Lys Val Pro Lys Tyr Leu Ser Gln Gln Trp Ala
                               20                               25                               30
Lys Ala Ser Gly Arg Gly Glu Val Gly Lys Leu Arg Ile Ala Lys Thr
                               35                               40                               45
Gln Gly Arg Thr Glu Val Ser Phe Thr Leu Asn Glu Asp Leu Ala Asn
                               50                               55                               60
Ile His Asp Ile Gly Gly Lys Pro Ala Ser Val Ser Ala Pro Arg Glu
65                               70                               75                               80
His Pro Phe Val Leu Gln Ser Val Gly Gly Gln Thr Leu Thr Val Phe
                               85                               90                               95
Thr Glu Ser Ser Ser Asp Lys Leu Ser Leu Glu Gly Ile Val Val Gln
                               100                               105                               110

```


Arg	Ala	Glu	Cys	Arg	Pro	Ala	Ala	Ser	Glu	Asn	Tyr	Met	Arg	Leu	Lys
	115						120					125			
Arg	Leu	Gln	Ile	Glu	Glu	Ser	Ser	Lys	Pro	Val	Arg	Leu	Ser	Gln	Gln
	130						135					140			
Leu	Asp	Lys	Val	Val	Thr	Thr	Asn	Tyr	Lys	Pro	Val	Ala	Asn	His	Gln
	145					150					155				160
Tyr	Asn	Ile	Glu	Tyr	Glu	Arg	Lys	Lys	Lys	Glu	Asp	Gly	Lys	Arg	Ala
			165						170					175	
Arg	Ala	Asp	Lys	Gln	His	Val	Leu	Asp	Met	Leu	Phe	Ser	Ala	Phe	Glu
			180						185				190		
Lys	His	Gln	Tyr	Tyr	Asn	Leu	Lys	Asp	Leu	Val	Asp	Ile	Thr	Lys	Gln
		195					200					205			
Pro	Val	Val	Tyr	Leu	Lys	Glu	Ile	Leu	Lys	Glu	Ile	Gly	Val	Gln	Asn
	210					215					220				
Val	Lys	Gly	Ile	His	Lys	Asn	Thr	Trp	Glu	Leu	Lys	Pro	Glu	Tyr	Arg
	225				230					235					240
His	Tyr	Gln	Gly	Glu	Glu	Lys	Ser	Asp	*						
			245					249							

<210> 1847

<211> 55

<212> PRT

<213> Homo sapiens

<400> 1847

Met	Leu	Asn	His	Ile	Ile	Arg	Leu	Gln	Ala	Val	Leu	Glu	Ile	Ile	Met
1				5					10					15	
Asn	Glu	Arg	Ala	Asn	Ala	Leu	Asp	Leu	Leu	Ala	Gln	Gln	Thr	Thr	Lys
			20					25					30		
Met	Arg	Asn	Ala	Asn	Tyr	Gln	Asn	Arg	Leu	Ala	Leu	Asp	Tyr	Leu	Leu
		35					40					45			
Ala	His	Glu	Gly	Gly	Val	*									
	50				54										

<210> 1848

<211> 377

<212> PRT

<213> Homo sapiens

<400> 1848

Met	Ala	Glu	Arg	Gly	Arg	Lys	Arg	Pro	Cys	Gly	Pro	Gly	Glu	His	Gly
1				5					10					15	
Gln	Arg	Ile	Glu	Trp	Arg	Lys	Trp	Lys	Gln	Gln	Lys	Lys	Glu	Glu	Lys
			20					25					30		
Lys	Lys	Trp	Lys	Asp	Leu	Lys	Leu	Met	Lys	Lys	Leu	Glu	Arg	Gln	Arg
		35					40					45			
Ala	Gln	Glu	Glu	Gln	Ala	Lys	Arg	Leu	Glu	Glu	Glu	Glu	Ala	Ala	Ala
	50					55					60				
Glu	Lys	Glu	Asp	Arg	Gly	Arg	Pro	Tyr	Thr	Leu	Ser	Val	Ala	Leu	Pro
	65				70					75				80	
Gly	Ser	Ile	Leu	Asp	Asn	Ala	Gln	Ser	Pro	Glu	Leu	Arg	Thr	Tyr	Leu
			85					90					95		
Ala	Gly	Gln	Ile	Ala	Arg	Ala	Cys	Ala	Ile	Phe	Cys	Val	Asp	Glu	Ile
		100						105					110		
Val	Val	Phe	Asp	Glu	Glu	Gly	Gln	Asp	Ala	Lys	Thr	Val	Glu	Gly	Glu
		115					120						125		
Phe	Thr	Gly	Val	Gly	Lys	Lys	Gly	Gln	Ala	Cys	Val	Gln	Leu	Ala	Arg
	130					135						140			

Ile	Leu	Gln	Tyr	Leu	Glu	Cys	Pro	Gln	Tyr	Leu	Arg	Lys	Ala	Phe	Phe
145					150					155					160
Pro	Lys	His	Gln	Asp	Leu	Gln	Phe	Ala	Gly	Leu	Leu	Asn	Pro	Leu	Asp
				165					170						175
Ser	Pro	His	His	Met	Arg	Gln	Asp	Glu	Glu	Ser	Glu	Phe	Arg	Glu	Gly
			180					185					190		
Ile	Val	Val	Asp	Arg	Pro	Thr	Arg	Pro	Gly	His	Gly	Ser	Phe	Val	Asn
		195					200					205			
Cys	Gly	Met	Lys	Lys	Glu	Val	Lys	Ile	Asp	Lys	Asn	Leu	Glu	Pro	Gly
	210					215					220				
Leu	Arg	Val	Thr	Val	Arg	Leu	Asn	Gln	Gln	Gln	His	Pro	Asp	Cys	Lys
225					230					235					240
Thr	Tyr	His	Gly	Lys	Val	Val	Ser	Ser	Gln	Asp	Pro	Arg	Thr	Lys	Ala
				245					250					255	
Gly	Leu	Tyr	Trp	Gly	Tyr	Thr	Val	Arg	Leu	Ala	Ser	Cys	Leu	Ser	Ala
			260					265					270		
Val	Phe	Ala	Glu	Ala	Pro	Phe	Gln	Asp	Gly	Tyr	Asp	Leu	Thr	Ile	Gly
		275					280					285			
Thr	Ser	Glu	Arg	Gly	Ser	Asp	Val	Ala	Ser	Ala	Gln	Leu	Pro	Asn	Phe
	290					295					300				
Arg	His	Ala	Leu	Val	Val	Phe	Gly	Gly	Leu	Gln	Gly	Leu	Glu	Ala	Gly
305					310					315					320
Ala	Asp	Ala	Asp	Pro	Asn	Leu	Glu	Val	Ala	Glu	Pro	Ser	Val	Leu	Phe
				325					330					335	
Asp	Leu	Tyr	Val	Asn	Thr	Cys	Pro	Gly	Gln	Gly	Ser	Arg	Thr	Ile	Arg
		340						345				350			
Thr	Glu	Glu	Ala	Ile	Leu	Ile	Ser	Leu	Ala	Ala	Leu	Gln	Pro	Gly	Leu
	355						360					365			
Thr	Gln	Ala	Gly	Ala	Arg	His	Thr	*							
	370					375	376								

<210> 1849

<211> 312

<212> PRT

<213> Homo sapiens

<400> 1849

Met	Ser	Asn	Phe	Thr	His	Tyr	Ala	Tyr	Leu	Leu	Met	Ile	Glu	Ser	Leu
1				5					10					15	
Met	Leu	Gly	Lys	Val	Pro	Pro	His	Val	Pro	Ser	His	His	Phe	Ile	Phe
			20					25					30		
His	Asp	Asp	Gly	Ser	Ala	Arg	Gln	Lys	Gly	Glu	Ser	Asp	Tyr	Lys	Val
		35					40					45			
Ile	Ile	Gln	Gln	Trp	Phe	Ser	Lys	Ser	Gly	Pro	Trp	Thr	Thr	Ser	Ser
	50					55					60				
Asn	Val	Thr	Trp	Gly	Leu	Leu	Glu	Leu	Gln	Gln	Ser	Ile	Ser	Glu	Ser
65					70					75					80
Ala	Val	Leu	Thr	Ile	Pro	Pro	Gly	Asp	Ser	Gly	Ala	Gly	Ser	Asn	Leu
				85					90					95	
Ile	Thr	Met	Phe	Leu	Arg	Asn	Arg	Lys	Glu	Thr	Asp	Leu	Cys	Ser	Gly
		100						105					110		
Arg	Ser	Lys	Val	Asn	Arg	Gly	Trp	Asn	Ser	Gly	Arg	Cys	Lys	Gln	Arg
		115					120					125			
Gly	Lys	Thr	Glu	Gln	Pro	Gly	Glu	Pro	Leu	Glu	His	Val	Tyr	Val	Thr
	130					135					140				
Ile	Lys	His	Ala	Val	Ala	Leu	Glu	Ser	Arg	His	Gln	Lys	Gly	Glu	Leu
145					150					155					160
Gln	Cys	Leu	Ile	Lys	Met	Cys	Ile	Pro	Leu	Ser	Lys	Pro	Leu	Gln	Met
				165					170					175	
Phe	Phe	Ser	Pro	Pro	His	Trp	Glu	Ala	Trp	Leu	Gln	Arg	Val	Gln	Gln
			180					185					190		

Leu	Ala	Lys	Asn	Thr	Arg	Tyr	Phe	Arg	Gln	Arg	Leu	Gln	Glu	Met	Gly
		195					200					205			
Phe	Ile	Ile	Tyr	Gly	Asn	Glu	Asn	Ala	Ser	Val	Val	Pro	Leu	Leu	Leu
	210				215						220				
Tyr	Met	Pro	Gly	Lys	Val	Ala	Ala	Phe	Ala	Arg	His	Met	Leu	Glu	Lys
225				230						235					240
Lys	Ile	Gly	Val	Val	Val	Val	Gly	Phe	Pro	Ala	Thr	Pro	Leu	Ala	Glu
			245					250						255	
Ala	Arg	Ala	Arg	Phe	Cys	Val	Ser	Ala	Ala	His	Thr	Arg	Glu	Met	Leu
			260					265					270		
Asp	Thr	Val	Leu	Glu	Ala	Leu	Asp	Glu	Met	Gly	Asp	Leu	Leu	Gln	Leu
		275					280					285			
Lys	Tyr	Ser	Arg	His	Lys	Lys	Ser	Ala	Arg	Pro	Glu	Leu	Tyr	Asp	Glu
	290					295					300				
Thr	Ser	Phe	Glu	Leu	Glu	Asp	*								
305					310	311									

<210> 1850
 <211> 96
 <212> PRT
 <213> Homo sapiens

<400> 1850

Met	Val	Val	Ile	Asp	Val	Lys	Met	Leu	Ser	Gly	Phe	Thr	Pro	Thr	Met
1				5				10						15	
Ser	Ser	Ile	Glu	Glu	Leu	Glu	Asn	Lys	Gly	Gln	Val	Met	Lys	Thr	Glu
		20					25						30		
Val	Lys	Asn	Asp	His	Val	Leu	Phe	Tyr	Leu	Glu	Asn	Gly	Phe	Gly	Arg
	35					40					45				
Ala	Asp	Ser	Phe	Pro	Phe	Ser	Val	Glu	Gln	Ser	Asn	Leu	Val	Phe	Asn
	50				55					60					
Ile	Gln	Pro	Ala	Pro	Ala	Met	Val	Tyr	Asp	Tyr	Tyr	Glu	Lys	Glu	Glu
65				70				75							80
Tyr	Ala	Leu	Ala	Phe	Tyr	Asn	Ile	Asp	Ser	Ser	Ser	Val	Ser	Glu	*
			85					90						95	

<210> 1851
 <211> 737
 <212> PRT
 <213> Homo sapiens

<400> 1851

Met	Ala	Thr	Glu	Gly	Met	Ile	Leu	Thr	Asn	His	Asp	His	Gln	Ile	Arg
1				5				10						15	
Val	Gly	Val	Leu	Thr	Val	Ser	Asp	Ser	Cys	Phe	Arg	Asn	Leu	Ala	Glu
		20					25						30		
Asp	Arg	Ser	Gly	Ile	Asn	Leu	Lys	Asp	Leu	Val	Gln	Asp	Pro	Ser	Leu
	35				40						45				
Leu	Gly	Gly	Thr	Ile	Ser	Ala	Tyr	Lys	Ile	Val	Pro	Asp	Glu	Ile	Glu
	50				55					60					
Glu	Ile	Lys	Glu	Thr	Leu	Ile	Asp	Trp	Cys	Asp	Glu	Lys	Glu	Leu	Asn
65				70				75							80
Leu	Ile	Leu	Thr	Thr	Gly	Gly	Thr	Gly	Phe	Ala	Pro	Arg	Asp	Val	Thr
			85				90							95	
Pro	Glu	Ala	Thr	Lys	Glu	Val	Ile	Glu	Arg	Glu	Ala	Pro	Gly	Met	Ala
	100						105						110		
Leu	Ala	Met	Leu	Met	Gly	Ser	Leu	Asn	Val	Thr	Pro	Leu	Gly	Met	Leu
	115						120						125		

Ser	Arg	Pro	Val	Cys	Gly	Ile	Arg	Gly	Lys	Thr	Leu	Ile	Ile	Asn	Leu
130						135					140				
Pro	Gly	Ser	Lys	Lys	Gly	Ser	Gln	Glu	Cys	Phe	Gln	Phe	Ile	Leu	Pro
145					150					155					160
Ala	Leu	Pro	His	Ala	Ile	Asp	Leu	Leu	Arg	Asp	Ala	Ile	Val	Lys	Val
				165					170					175	
Lys	Glu	Val	His	Asp	Glu	Leu	Glu	Asp	Leu	Pro	Ser	Pro	Pro	Pro	Pro
			180					185					190		
Leu	Ser	Pro	Pro	Pro	Thr	Thr	Ser	Pro	His	Lys	Gln	Thr	Glu	Asp	Lys
		195					200					205			
Gly	Val	Gln	Cys	Glu	Glu	Glu	Glu	Glu	Glu	Lys	Lys	Asp	Ser	Gly	Val
	210					215						220			
Ala	Ser	Thr	Glu	Asp	Ser	Ser	Ser	Ser	His	Ile	Thr	Ala	Ala	Ala	Ile
225					230					235					240
Ala	Ala	Lys	Ile	Pro	Asp	Ser	Ile	Ile	Ser	Arg	Gly	Val	Gln	Val	Leu
				245					250					255	
Pro	Arg	Asp	Thr	Ala	Ser	Leu	Ser	Thr	Thr	Pro	Ser	Glu	Ser	Pro	Arg
			260					265					270		
Ala	Gln	Ala	Thr	Ser	Arg	Leu	Ser	Thr	Ala	Ser	Cys	Pro	Thr	Pro	Lys
		275					280					285			
Val	Gln	Ser	Arg	Cys	Ser	Ser	Lys	Glu	Asn	Ile	Leu	Arg	Ala	Ser	His
	290					295					300				
Ser	Ala	Val	Asp	Ile	Thr	Lys	Val	Ala	Arg	Arg	His	Arg	Met	Ser	Pro
305					310					315					320
Phe	Pro	Leu	Thr	Ser	Met	Asp	Lys	Ala	Phe	Ile	Thr	Val	Leu	Glu	Met
				325					330					335	
Thr	Pro	Val	Leu	Gly	Thr	Glu	Ile	Ile	Asn	Tyr	Arg	Asp	Gly	Met	Gly
			340					345					350		
Arg	Val	Leu	Ala	Gln	Asp	Val	Tyr	Ala	Lys	Asp	Asn	Leu	Pro	Pro	Phe
		355					360					365			
Pro	Ala	Ser	Val	Lys	Asp	Gly	Tyr	Ala	Val	Arg	Ala	Ala	Asp	Gly	Pro
	370					375					380				
Gly	Asp	Arg	Phe	Ile	Ile	Gly	Glu	Ser	Gln	Ala	Gly	Glu	Gln	Pro	Thr
385					390					395					400
Gln	Thr	Val	Met	Pro	Gly	Gln	Val	Met	Arg	Val	Thr	Thr	Gly	Ala	Pro
			405						410					415	
Ile	Pro	Cys	Gly	Ala	Asp	Ala	Val	Val	Gln	Val	Glu	Asp	Thr	Glu	Leu
			420					425					430		
Ile	Arg	Glu	Ser	Asp	Asp	Gly	Thr	Glu	Glu	Leu	Glu	Val	Arg	Ile	Leu
		435					440					445			
Val	Gln	Ala	Arg	Pro	Gly	Gln	Asp	Ile	Arg	Pro	Ile	Gly	His	Asp	Ile
	450					455					460				
Lys	Arg	Gly	Glu	Cys	Val	Leu	Ala	Lys	Gly	Thr	His	Met	Gly	Pro	Ser
465					470					475					480
Glu	Ile	Gly	Leu	Leu	Ala	Thr	Val	Gly	Val	Thr	Glu	Val	Glu	Val	Asn
			485						490					495	
Lys	Phe	Pro	Val	Val	Ala	Val	Met	Ser	Thr	Gly	Asn	Glu	Leu	Leu	Asn
		500						505					510		
Pro	Glu	Asp	Asp	Leu	Leu	Pro	Gly	Lys	Ile	Arg	Asp	Ser	Asn	Arg	Ser
		515					520					525			
Thr	Leu	Leu	Ala	Thr	Ile	Gln	Glu	His	Gly	Tyr	Pro	Thr	Ile	Asn	Leu
	530					535						540			
Gly	Ile	Val	Gly	Asp	Asn	Pro	Asp	Asp	Leu	Leu	Asn	Ala	Leu	Asn	Glu
545					550					555					560
Gly	Ile	Ser	Arg	Ala	Asp	Val	Ile	Ile	Thr	Ser	Gly	Gly	Val	Ser	Met
			565						570					575	
Gly	Glu	Lys	Asp	Tyr	Leu	Lys	Gln	Val	Leu	Asp	Ile	Asp	Leu	His	Ala
		580						585					590		
Gln	Ile	His	Phe	Gly	Arg	Val	Phe	Met	Lys	Pro	Gly	Leu	Pro	Thr	Thr
		595					600					605			
Phe	Ala	Thr	Leu	Asp	Ile	Asp	Gly	Val	Arg	Lys	Ile	Ile	Phe	Ala	Leu
	610					615					620				
Pro	Gly	Asn	Pro	Val	Ser	Ala	Val	Val	Thr	Cys	Asn	Leu	Phe	Val	Val
625					630					635					640

Pro Ala Leu Arg Lys Met Gln Gly Ile Leu Asp Pro Arg Pro Thr Ile
645 650 655
Ile Lys Ala Arg Leu Ser Cys Asp Val Lys Leu Asp Pro Arg Pro Glu
660 665 670
Tyr His Arg Cys Ile Leu Thr Trp His His Gln Glu Pro Leu Pro Trp
675 680 685
Ala Gln Ser Thr Gly Asn Gln Met Ser Ser Arg Leu Met Ser Met Arg
690 695 700
Ser Ala Asn Gly Leu Leu Met Leu Pro Pro Lys Thr Glu Gln Tyr Val
705 710 715 720
Glu Leu His Lys Gly Glu Val Val Asp Val Met Val Ile Gly Arg Leu
725 730 735 736

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<210> 1852
<211> 651
<212> PRT
<213> Homo sapiens

<400> 1852
Met Ala Gly Arg Glu Ala Leu Ser Leu Gly Thr Glu Ala Glu Leu Pro
1 5 10 15
Asn Ser Leu Pro Gly Asp Asp Gln Asp Glu Cys Leu Leu Leu Pro Gly
20 25 30
Glu Leu Cys Gln His Leu Cys Ile Asn Thr Val Gly Ser Tyr His Cys
35 40 45
Ala Cys Phe Pro Gly Phe Ser Leu Gln Asp Asp Gly Arg Thr Cys Arg
50 55 60
Pro Glu Gly His Pro Pro Gln Pro Glu Ala Pro Gln Glu Pro Ala Leu
65 70 75 80
Lys Ser Glu Phe Ser Gln Val Ala Ser Asn Thr Ile Pro Leu Pro Leu
85 90 95
Pro Gln Pro Asn Thr Cys Lys Asp Asn Gly Pro Cys Lys Gln Val Cys
100 105 110
Ser Thr Val Gly Gly Ser Ala Ile Cys Ser Cys Phe Pro Gly Tyr Ala
115 120 125
Ile Met Ala Asp Gly Val Ser Cys Glu Asp Gln Asp Glu Cys Leu Met
130 135 140
Gly Ala His Asp Cys Ser Arg Arg Gln Phe Cys Val Asn Thr Leu Gly
145 150 155 160
Ser Phe Tyr Cys Val Asn His Thr Val Leu Cys Ala Asp Gly Tyr Ile
165 170 175
Leu Asn Ala His Arg Lys Cys Val Asp Ile Asn Glu Cys Val Thr Asp
180 185 190
Leu His Thr Cys Ser Arg Gly Glu His Cys Val Asn Thr Leu Gly Ser
195 200 205
Phe His Cys Tyr Lys Ala Leu Thr Cys Glu Pro Gly Tyr Ala Leu Lys
210 215 220
Asp Gly Glu Cys Glu Asp Val Asp Glu Cys Ala Met Gly Thr His Thr
225 230 235 240
Cys Gln Pro Gly Phe Leu Cys Gln Asn Thr Lys Gly Ser Phe Tyr Cys
245 250 255
Gln Ala Arg Gln Arg Cys Met Asp Gly Phe Leu Gln Asp Pro Glu Gly
260 265 270
Asn Cys Val Asp Ile Asn Glu Cys Thr Ser Leu Ser Glu Pro Cys Arg
275 280 285
Pro Gly Phe Ser Cys Ile Asn Thr Val Gly Ser Tyr Thr Cys Gln Arg
290 295 300
Asn Pro Leu Ile Cys Ala Arg Gly Tyr His Ala Ser Asp Asp Gly Thr
305 310 315 320

Lys Cys Val Asp Val Asn Glu Cys Glu Thr Gly Val His Arg Cys Gly
 325 330 335
 Glu Gly Gln Val Cys His Asn Leu Pro Gly Ser Tyr Arg Cys Asp Cys
 340 345 350
 Lys Ala Gly Phe Gln Arg Asp Ala Phe Gly Arg Gly Cys Ile Asp Val
 355 360 365
 Asn Glu Cys Trp Ala Ser Pro Gly Arg Leu Cys Gln His Thr Cys Glu
 370 375 380
 Asn Thr Leu Gly Ser Tyr Arg Cys Ser Cys Ala Ser Gly Phe Leu Leu
 385 390 395 400
 Ala Ala Asp Gly Lys Arg Cys Glu Asp Val Asn Glu Cys Glu Ala Gln
 405 410 415
 Arg Cys Ser Gln Glu Cys Ala Asn Ile Tyr Gly Ser Tyr Gln Cys Tyr
 420 425 430
 Cys Arg Gln Gly Tyr Gln Leu Ala Glu Asp Gly His Thr Cys Thr Asp
 435 440 445
 Ile Asp Glu Cys Ala Gln Gly Ala Gly Ile Leu Cys Thr Phe Arg Cys
 450 455 460
 Leu Asn Val Pro Gly Ser Tyr Gln Cys Ala Cys Pro Glu Gln Gly Tyr
 465 470 475 480
 Thr Met Thr Ala Asn Gly Arg Ser Cys Lys Asp Val Asp Glu Cys Ala
 485 490 495
 Leu Gly Thr His Asn Cys Ser Glu Ala Glu Thr Cys His Asn Ile Gln
 500 505 510
 Gly Ser Phe Arg Cys Leu Arg Phe Glu Cys Pro Pro Asn Tyr Val Gln
 515 520 525
 Val Ser Lys Thr Lys Cys Glu Arg Thr Thr Cys His Asp Phe Leu Glu
 530 535 540
 Cys Gln Asn Ser Pro Ala Arg Ile Thr His Tyr Gln Leu Asn Phe Gln
 545 550 555 560
 Thr Gly Leu Leu Val Pro Ala His Ile Phe Arg Ile Gly Pro Ala Pro
 565 570 575
 Ala Phe Thr Gly Asp Thr Ile Ala Leu Asn Ile Ile Lys Gly Asn Glu
 580 585 590
 Glu Gly Tyr Phe Gly Thr Arg Arg Leu Asn Ala Tyr Thr Gly Val Val
 595 600 605
 Tyr Leu Gln Arg Ala Val Leu Glu Pro Arg Asp Phe Ala Leu Asp Val
 610 615 620
 Glu Met Lys Leu Trp Arg Gln Gly Ser Val Thr Thr Phe Leu Ala Lys
 625 630 635 640
 Met His Ile Phe Phe Thr Thr Phe Ala Leu *
 645 650

<210> 1853

<211> 604

<212> PRT

<213> Homo sapiens

<400> 1853

Met Ala Gly Arg Glu Ala Leu Ser Leu Gly Thr Glu Ala Glu Leu Pro
 1 5 10 15
 Asn Ser Leu Pro Gly Asp Asp Gln Asp Glu Cys Leu Leu Leu Pro Gly
 20 25 30
 Glu Leu Cys Gln His Leu Cys Ile Asn Thr Val Gly Ser Tyr His Cys
 35 40 45
 Ala Cys Phe Pro Gly Phe Ser Leu Gln Asp Asp Gly Arg Thr Cys Arg
 50 55 60
 Pro Glu Gly His Pro Pro Gln Pro Glu Ala Pro Gln Glu Pro Ala Leu
 65 70 75 80
 Lys Ser Glu Phe Ser Gln Val Ala Ser Asn Thr Ile Pro Leu Pro Leu
 85 90 95

Pro	Gln	Pro	Asn	Thr	Cys	Lys	Asp	Asn	Gly	Pro	Cys	Lys	Gln	Val	Cys	
			100					105					110			
Ser	Thr	Val	Gly	Gly	Ser	Ala	Ile	Cys	Ser	Cys	Phe	Pro	Gly	Tyr	Ala	
		115					120				125					
Ile	Met	Ala	Asp	Gly	Val	Ser	Cys	Glu	Asp	Ile	Asn	Glu	Cys	Val	Thr	
	130					135					140					
Asp	Leu	His	Thr	Cys	Ser	Arg	Gly	Glu	His	Cys	Val	Asn	Thr	Leu	Gly	
145					150					155					160	
Ser	Phe	His	Cys	Tyr	Lys	Ala	Leu	Thr	Cys	Glu	Pro	Gly	Tyr	Ala	Leu	
			165						170					175		
Lys	Asp	Gly	Glu	Cys	Glu	Asp	Val	Asp	Glu	Cys	Ala	Met	Gly	Thr	His	
		180						185					190			
Thr	Cys	Gln	Pro	Gly	Phe	Leu	Cys	Gln	Asn	Thr	Lys	Gly	Ser	Phe	Tyr	
		195					200					205				
Cys	Gln	Ala	Arg	Gln	Arg	Cys	Met	Asp	Gly	Phe	Leu	Gln	Asp	Pro	Glu	
	210					215					220					
Gly	Asn	Cys	Val	Asp	Ile	Asn	Glu	Cys	Thr	Ser	Leu	Ser	Glu	Pro	Cys	
225					230					235					240	
Arg	Pro	Gly	Phe	Ser	Cys	Ile	Asn	Thr	Val	Gly	Ser	Tyr	Thr	Cys	Gln	
				245					250					255		
Arg	Asn	Pro	Leu	Ile	Cys	Ala	Arg	Gly	Tyr	His	Ala	Ser	Asp	Asp	Gly	
		260						265					270			
Thr	Lys	Cys	Val	Asp	Val	Asn	Glu	Cys	Glu	Thr	Gly	Val	His	Arg	Cys	
	275					280						285				
Gly	Glu	Gly	Gln	Val	Cys	His	Asn	Leu	Pro	Gly	Ser	Tyr	Arg	Cys	Asp	
	290					295					300					
Cys	Lys	Ala	Gly	Phe	Gln	Arg	Asp	Ala	Phe	Gly	Arg	Gly	Cys	Ile	Asp	
305					310					315					320	
Val	Asn	Glu	Cys	Trp	Ala	Ser	Pro	Gly	Arg	Leu	Cys	Gln	His	Thr	Cys	
			325						330					335		
Glu	Asn	Thr	Leu	Gly	Ser	Tyr	Arg	Cys	Ser	Cys	Ala	Ser	Gly	Phe	Leu	
		340						345					350			
Leu	Ala	Ala	Asp	Gly	Lys	Arg	Cys	Glu	Asp	Val	Asn	Glu	Cys	Glu	Ala	
		355					360					365				
Gln	Arg	Cys	Ser	Gln	Glu	Cys	Ala	Asn	Ile	Tyr	Gly	Ser	Tyr	Gln	Cys	
	370					375					380					
Tyr	Cys	Arg	Gln	Gly	Tyr	Gln	Leu	Ala	Glu	Asp	Gly	His	Thr	Cys	Thr	
385					390					395					400	
Asp	Ile	Asp	Glu	Cys	Ala	Gln	Gly	Ala	Gly	Ile	Leu	Cys	Thr	Phe	Arg	
				405					410					415		
Cys	Leu	Asn	Val	Pro	Gly	Ser	Tyr	Gln	Cys	Ala	Cys	Pro	Glu	Gln	Gly	
		420						425					430			
Tyr	Thr	Met	Thr	Ala	Asn	Gly	Arg	Ser	Cys	Lys	Asp	Val	Asp	Glu	Cys	
		435					440					445				
Ala	Leu	Gly	Thr	His	Asn	Cys	Ser	Glu	Ala	Glu	Thr	Cys	His	Asn	Ile	
	450					455						460				
Gln	Gly	Ser	Phe	Arg	Cys	Leu	Arg	Phe	Glu	Cys	Pro	Pro	Asn	Tyr	Val	
465					470					475					480	
Gln	Val	Ser	Lys	Thr	Lys	Cys	Glu	Arg	Thr	Thr	Cys	His	Asp	Phe	Leu	
				485					490					495		
Glu	Cys	Gln	Asn	Ser	Pro	Ala	Arg	Ile	Thr	His	Tyr	Gln	Leu	Asn	Phe	
		500						505					510			
Gln	Thr	Gly	Leu	Leu	Val	Pro	Ala	His	Ile	Phe	Arg	Ile	Gly	Pro	Ala	
	515					520						525				
Pro	Ala	Phe	Thr	Gly	Asp	Thr	Ile	Ala	Leu	Asn	Ile	Ile	Lys	Gly	Asn	
	530					535					540					
Glu	Glu	Gly	Tyr	Phe	Gly	Thr	Arg	Arg	Leu	Asn	Ala	Tyr	Thr	Gly	Val	
545					550					555					560	
Val	Tyr	Leu	Gln	Arg	Ala	Val	Leu	Glu	Pro	Arg	Asp	Phe	Ala	Leu	Asp	
				565					570					575		
Val	Glu	Met	Lys	Leu	Trp	Arg	Gln	Gly	Ser	Val	Thr	Thr	Phe	Leu	Ala	
		580						585						590		
Lys	Met	His	Ile	Phe	Phe	Thr	Thr	Phe	Ala	Leu	*					
		595					600			603						

<210> 1854
 <211> 74
 <212> PRT
 <213> Homo sapiens

<400> 1854
 Met Glu Glu Arg Pro Leu Asp Ala Val Val Pro Phe Leu Pro Leu Gln
 1 5 10 15
 Arg His His Val Arg His Cys Val Leu Asn Glu Leu Ala Gln Leu Gly
 20 25 30
 Leu Glu Pro Arg Asp Glu Val Val Gln Ala Val Leu Asp Ser Thr Thr
 35 40 45
 Phe Phe Pro Glu Asp Glu Gln Leu Phe Ser Ser Asn Gly Cys Lys Thr
 50 55 60
 Val Ala Ser Arg Ile Ala Phe Phe Leu *
 65 70 73

<210> 1855
 <211> 1217
 <212> PRT
 <213> Homo sapiens

<400> 1855
 Met Pro Gly Ala Gln Pro Gly Val His Ala Leu Gln Leu Lys Pro Val
 1 5 10 15
 Cys Val Ser Asp Ser Leu Lys Lys Gly Thr Lys Phe Val Lys Trp Asp
 20 25 30
 Asp Asp Ser Thr Ser Val Thr Pro Ile Ile Val Arg Thr Asp Pro Gln
 35 40 45
 Gly Phe Phe Phe Tyr Trp Thr Asp Gln Asn Lys Glu Thr Glu Leu Leu
 50 55 60
 Asp Leu Ser Leu Val Lys Asp Ala Arg Cys Gly Arg His Ala Lys Ala
 65 70 75 80
 Pro Lys Asp Pro Lys Leu Arg Glu Leu Leu Asp Val Gly Asn Ile Gly
 85 90 95
 Arg Leu Glu Gln Arg Met Ile Thr Val Val Tyr Gly Pro Asp Leu Val
 100 105 110
 Asn Ile Ser His Leu Asn Leu Val Ala Phe Gln Glu Glu Val Ala Lys
 115 120 125
 Glu Trp Thr Asn Glu Val Phe Ser Leu Ala Thr Asn Leu Leu Ala Gln
 130 135 140
 Asn Met Ser Arg Asp Ala Phe Leu Glu Lys Ala Tyr Thr Lys Leu Lys
 145 150 155 160
 Leu Gln Val Thr Pro Glu Gly Arg Ile Pro Leu Lys Asn Ile Tyr Arg
 165 170 175
 Leu Phe Ser Ala Asp Arg Lys Arg Val Glu Thr Ala Leu Glu Ala Cys
 180 185 190
 Ser Leu Pro Ser Ser Arg Asn Asp Ser Ile Pro Gln Glu Asp Phe Thr
 195 200 205
 Pro Glu Val Tyr Arg Val Phe Leu Asn Asn Leu Cys Pro Arg Pro Glu
 210 215 220
 Ile Asp Asn Ile Phe Ser Glu Phe Gly Ala Lys Ser Lys Pro Tyr Leu
 225 230 235 240
 Thr Val Asp Gln Met Met Asp Phe Ile Asn Leu Lys Gln Arg Asp Pro
 245 250 255
 Arg Leu Asn Glu Ile Leu Tyr Pro Pro Leu Lys Gln Glu Gln Val Gln
 260 265 270

Val	Leu	Ile	Glu	Lys	Tyr	Glu	Pro	Asn	Asn	Ser	Leu	Ala	Arg	Lys	Gly	275	280	285
Gln	Ile	Ser	Val	Asp	Gly	Phe	Met	Arg	Tyr	Leu	Ser	Gly	Glu	Glu	Asn	290	295	300
Gly	Val	Val	Ser	Pro	Glu	Lys	Leu	Asp	Leu	Asn	Glu	Asp	Met	Ser	Gln	305	310	315
Pro	Leu	Ser	His	Tyr	Phe	Ile	Asn	Ser	Ser	His	Asn	Thr	Tyr	Leu	Thr	325	330	335
Ala	Gly	Gln	Leu	Ala	Gly	Asn	Ser	Ser	Val	Glu	Met	Tyr	Arg	Gln	Val	340	345	350
Leu	Leu	Ser	Gly	Cys	Arg	Cys	Val	Glu	Leu	Asp	Cys	Trp	Lys	Gly	Arg	355	360	365
Thr	Ala	Glu	Glu	Glu	Pro	Val	Ile	Thr	His	Gly	Phe	Thr	Met	Thr	Thr	370	375	380
Glu	Ile	Ser	Phe	Lys	Glu	Val	Ile	Glu	Ala	Ile	Ala	Glu	Cys	Ala	Phe	385	390	395
Lys	Thr	Ser	Pro	Phe	Pro	Ile	Leu	Leu	Ser	Phe	Glu	Asn	His	Val	Asp	405	410	415
Ser	Pro	Lys	Gln	Gln	Ala	Lys	Met	Ala	Glu	Tyr	Cys	Arg	Leu	Ile	Phe	420	425	430
Gly	Asp	Ala	Leu	Leu	Met	Glu	Pro	Leu	Glu	Lys	Tyr	Pro	Leu	Glu	Ser	435	440	445
Gly	Val	Pro	Leu	Pro	Ser	Pro	Met	Asp	Leu	Met	Tyr	Lys	Ile	Leu	Val	450	455	460
Lys	Asn	Lys	Lys	Lys	Ser	His	Lys	Ser	Ser	Glu	Gly	Ser	Gly	Lys	Lys	465	470	475
Lys	Leu	Ser	Glu	Gln	Ala	Ser	Asn	Thr	Tyr	Ser	Asp	Ser	Ser	Ser	Met	485	490	495
Phe	Glu	Pro	Ser	Ser	Pro	Gly	Ala	Gly	Glu	Ala	Asp	Thr	Glu	Ser	Asp	500	505	510
Asp	Asp	Asp	Asp	Asp	Asp	Asp	Cys	Lys	Lys	Ser	Ser	Met	Asp	Glu	Gly	515	520	525
Thr	Ala	Gly	Ser	Glu	Ala	Met	Ala	Thr	Glu	Glu	Met	Ser	Asn	Leu	Val	530	535	540
Asn	Tyr	Ile	Gln	Pro	Val	Lys	Phe	Glu	Ser	Phe	Glu	Ile	Ser	Lys	Lys	545	550	555
Arg	Asn	Lys	Ser	Phe	Glu	Met	Ser	Ser	Phe	Val	Glu	Thr	Lys	Gly	Leu	565	570	575
Glu	Gln	Leu	Thr	Lys	Ser	Pro	Val	Glu	Phe	Val	Glu	Tyr	Asn	Lys	Met	580	585	590
Gln	Leu	Ser	Arg	Ile	Tyr	Pro	Lys	Gly	Thr	Arg	Val	Asp	Ser	Ser	Asn	595	600	605
Tyr	Met	Pro	Gln	Leu	Phe	Trp	Asn	Ala	Gly	Cys	Gln	Met	Val	Ala	Leu	610	615	620
Asn	Phe	Gln	Thr	Met	Asp	Leu	Ala	Met	Gln	Ile	Asn	Met	Gly	Met	Tyr	625	630	635
Glu	Tyr	Asn	Gly	Lys	Ser	Gly	Tyr	Arg	Leu	Lys	Pro	Glu	Phe	Met	Arg	645	650	655
Arg	Pro	Asp	Lys	His	Phe	Asp	Pro	Phe	Thr	Glu	Gly	Ile	Val	Asp	Gly	660	665	670
Ile	Val	Ala	Asn	Thr	Leu	Ser	Val	Lys	Ile	Ile	Ser	Gly	Gln	Phe	Leu	675	680	685
Ser	Asp	Lys	Lys	Val	Gly	Thr	Tyr	Val	Glu	Val	Asp	Met	Phe	Gly	Leu	690	695	700
Pro	Val	Asp	Thr	Arg	Arg	Lys	Ala	Phe	Lys	Thr	Lys	Thr	Ser	Gln	Gly	705	710	715
Asn	Ala	Val	Asn	Pro	Val	Trp	Glu	Glu	Glu	Pro	Ile	Val	Phe	Lys	Lys	725	730	735
Val	Val	Leu	Pro	Thr	Leu	Ala	Cys	Leu	Arg	Ile	Ala	Val	Tyr	Glu	Glu	740	745	750
Gly	Gly	Lys	Phe	Ile	Gly	His	Arg	Ile	Leu	Pro	Val	Gln	Ala	Ile	Arg	755	760	765
Pro	Gly	Tyr	His	Tyr	Ile	Cys	Leu	Arg	Asn	Glu	Arg	Asn	Gln	Pro	Leu	770	775	780

Thr Leu Pro Ala Val Phe Val Tyr Ile Glu Val Lys Asp Tyr Val Pro
 785 790 795 800
 Asp Thr Tyr Ala Asp Val Ile Glu Ala Leu Ser Asn Pro Ile Arg Tyr
 805 810 815
 Val Asn Leu Met Glu Gln Arg Ala Lys Gln Leu Ala Ala Leu Thr Leu
 820 825 830
 Glu Asp Glu Glu Glu Val Lys Lys Glu Ala Asp Pro Gly Glu Thr Pro
 835 840 845
 Ser Glu Ala Pro Ser Glu Ala Arg Thr Thr Pro Ala Glu Asn Gly Val
 850 855 860
 Asn His Thr Thr Thr Leu Thr Pro Lys Pro Pro Ser Gln Ala Leu His
 865 870 875 880
 Ser Gln Pro Ala Pro Gly Ser Val Lys Ala Pro Ala Lys Thr Glu Asp
 885 890 895
 Leu Ile Gln Ser Val Leu Thr Glu Val Glu Ala Gln Thr Ile Glu Glu
 900 905 910
 Leu Lys Gln Gln Lys Ser Phe Val Lys Leu Gln Lys Lys His Tyr Lys
 915 920 925
 Glu Met Lys Asp Leu Val Lys Arg His His Lys Lys Thr Thr Asp Leu
 930 935 940
 Ile Lys Glu His Thr Thr Lys Tyr Asn Glu Ile Gln Asn Asp Tyr Leu
 945 950 955 960
 Arg Arg Arg Ala Ala Leu Glu Lys Ser Ala Lys Lys Asp Ser Lys Lys
 965 970 975
 Lys Ser Glu Pro Ser Ser Pro Asp His Gly Ser Ser Thr Ile Glu Gln
 980 985 990
 Asp Leu Ala Ala Leu Asp Ala Glu Met Thr Gln Lys Leu Ile Asp Leu
 995 1000 1005
 Lys Asp Lys Gln Gln Gln Gln Leu Leu Asn Leu Arg Gln Glu Gln Tyr
 1010 1015 1020
 Tyr Ser Glu Lys Tyr Gln Lys Arg Glu His Ile Lys Leu Leu Ile Gln
 1025 1030 1035 1040
 Lys Leu Thr Asp Val Ala Glu Glu Cys Gln Asn Asn Gln Leu Lys Lys
 1045 1050 1055
 Leu Lys Glu Ile Cys Glu Lys Glu Lys Lys Glu Leu Lys Lys Lys Met
 1060 1065 1070
 Asp Lys Lys Arg Gln Glu Lys Ile Thr Glu Ala Lys Ser Lys Asp Lys
 1075 1080 1085
 Ser Gln Met Glu Glu Glu Lys Thr Glu Met Ile Arg Ser Tyr Ile Gln
 1090 1095 1100
 Glu Val Val Gln Tyr Ile Lys Arg Leu Glu Glu Ala Gln Ser Lys Arg
 1105 1110 1115 1120
 Gln Glu Lys Leu Val Glu Lys His Lys Glu Ile Arg Gln Gln Ile Leu
 1125 1130 1135
 Asp Glu Lys Pro Lys Leu Gln Val Glu Leu Glu Gln Glu Tyr Gln Asp
 1140 1145 1150
 Lys Phe Lys Arg Leu Pro Leu Glu Ile Leu Glu Phe Val Gln Glu Ala
 1155 1160 1165
 Met Lys Gly Lys Ile Ser Glu Asp Ser Asn His Gly Ser Ala Pro Leu
 1170 1175 1180
 Ser Leu Ser Ser Asp Pro Gly Lys Val Asn His Lys Thr Pro Ser Ser
 1185 1190 1195 1200
 Glu Glu Leu Gly Gly Asp Ile Pro Gly Lys Glu Phe Asp Thr Pro Leu
 1205 1210 1215 1216

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<210> 1856
 <211> 184
 <212> PRT
 <213> Homo sapiens

<400> 1856

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Met Lys Phe Asp Phe Tyr Ser Phe Phe Asp Gly Thr Ala Lys Arg Arg
 1          5          10          15
Arg Phe Ser Ser Lys Pro Val Val Leu Thr Glu Ala Gln Lys Gln Leu
          20          25          30
Met Ile Cys His Leu Pro Gln Val Leu Arg Leu His Leu Lys Arg Phe
          35          40          45
Arg Trp Ser Gly Arg Asn Asn Arg Glu Lys Ile Gly Val His Val Gly
          50          55          60
Phe Glu Glu Ile Leu Asn Met Glu Pro Tyr Cys Cys Arg Glu Thr Leu
          65          70          75          80
Lys Ser Leu Arg Pro Glu Cys Phe Ile Tyr Asp Leu Ser Ala Val Val
          85          90          95
Met His His Gly Lys Gly Phe Gly Ser Gly His Tyr Thr Ala Tyr Cys
          100          105          110
Tyr Asn Ser Glu Gly Gly Phe Trp Val His Cys Asn Asp Ser Lys Leu
          115          120          125
Ser Met Cys Thr Met Asp Glu Val Cys Lys Ala Gln Ala Tyr Ile Leu
          130          135          140
Phe Tyr Thr Gln Arg Val Thr Glu Asn Gly His Ser Lys Leu Leu Pro
          145          150          155          160
Pro Glu Leu Leu Leu Gly Ser Gln His Pro Asn Glu Asp Ala Asp Thr
          165          170          175
Ser Ser Asn Glu Ile Leu Ser *
          180          183

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<210> 1857

<211> 136

<212> PRT

<213> Homo sapiens

<400> 1857

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Met Pro Pro Pro Gln Lys Ile Pro Ser Val Arg Pro Phe Lys Gln Arg
 1          5          10          15
Lys Ser Leu Ala Ile Arg Gln Glu Glu Val Ala Gly Ile Arg Ala Lys
          20          25          30
Phe Pro Asn Lys Ile Pro Val Val Val Glu Arg Tyr Pro Arg Glu Thr
          35          40          45
Phe Leu Pro Pro Leu Asp Lys Thr Lys Phe Leu Val Pro Gln Glu Leu
          50          55          60
Thr Met Thr Gln Phe Leu Ser Ile Ile Arg Ser Arg Met Val Leu Arg
          65          70          75          80
Ala Thr Glu Ala Phe Tyr Leu Leu Val Asn Asn Lys Ser Leu Val Ser
          85          90          95
Met Ser Ala Thr Met Ala Glu Ile Tyr Arg Asp Cys Ile Gln Pro Tyr
          100          105          110
Asn Arg Ile Leu Asn Lys Lys Trp Leu Ala Cys Val Met Val Leu Cys
          115          120          125
Asn Glu Leu Glu Ile Ile Phe *
          130          135

```

<210> 1858

<211> 425

<212> PRT

<213> Homo sapiens

<400> 1858

Met	Cys	Trp	Lys	Gln	Met	Asp	Asn	Ser	Lys	Lys	Lys	Phe	Glu	Arg	Glu	1	5	10	15
Cys	Arg	Glu	Ala	Glu	Lys	Ala	Gln	Gln	Ser	Tyr	Glu	Arg	Leu	Asp	Asn	20	25	30	
Asp	Thr	Asn	Ala	Thr	Lys	Ala	Asp	Val	Glu	Lys	Ala	Lys	Gln	Gln	Leu	35	40	45	
Asn	Leu	Arg	Thr	His	Met	Ala	Asp	Glu	Asn	Lys	Asn	Glu	Tyr	Ala	Ala	50	55	60	
Gln	Leu	Gln	Asn	Phe	Asn	Gly	Glu	Gln	His	Lys	His	Phe	Tyr	Val	Val	65	70	75	80
Ile	Pro	Gln	Ile	Tyr	Lys	Gln	Leu	Gln	Glu	Met	Asp	Glu	Arg	Arg	Thr	85	90	95	
Ile	Lys	Leu	Ser	Glu	Cys	Tyr	Arg	Gly	Phe	Ala	Asp	Ser	Glu	Arg	Lys	100	105	110	
Val	Ile	Pro	Ile	Ile	Ser	Lys	Cys	Leu	Glu	Gly	Met	Ile	Leu	Ala	Ala	115	120	125	
Lys	Ser	Val	Asp	Glu	Arg	Arg	Asp	Ser	Gln	Met	Val	Val	Asp	Ser	Phe	130	135	140	
Lys	Ser	Gly	Phe	Glu	Pro	Pro	Gly	Asp	Phe	Pro	Phe	Glu	Asp	Tyr	Ser	145	150	155	160
Gln	His	Ile	Tyr	Arg	Thr	Ile	Ser	Asp	Gly	Thr	Ile	Ser	Ala	Ser	Lys	165	170	175	
Gln	Glu	Ser	Gly	Lys	Met	Asp	Ala	Lys	Thr	Thr	Val	Gly	Lys	Ala	Lys	180	185	190	
Gly	Lys	Leu	Trp	Leu	Phe	Gly	Lys	Lys	Pro	Lys	Gly	Pro	Ala	Leu	Glu	195	200	205	
Asp	Phe	Ser	His	Leu	Pro	Pro	Glu	Gln	Arg	Arg	Lys	Lys	Leu	Gln	Gln	210	215	220	
Arg	Ile	Asp	Glu	Leu	Asn	Arg	Glu	Leu	Gln	Lys	Glu	Ser	Asp	Gln	Lys	225	230	235	240
Asp	Ala	Leu	Asn	Lys	Met	Lys	Asp	Val	Tyr	Glu	Lys	Asn	Pro	Gln	Met	245	250	255	
Gly	Asp	Pro	Gly	Ser	Leu	Gln	Pro	Lys	Leu	Ala	Glu	Thr	Met	Asn	Asn	260	265	270	
Ile	Asp	Arg	Leu	Arg	Met	Glu	Ile	His	Lys	Asn	Glu	Ala	Trp	Leu	Ser	275	280	285	
Glu	Val	Glu	Gly	Lys	Thr	Gly	Gly	Arg	Gly	Asp	Arg	Arg	His	Ser	Ser	290	295	300	
Asp	Ile	Asn	His	Leu	Val	Thr	Gln	Gly	Arg	Glu	Ser	Pro	Glu	Gly	Ser	305	310	315	320
Tyr	Thr	Asp	Asp	Ala	Asn	Gln	Glu	Val	Arg	Gly	Pro	Pro	Gln	Gln	His	325	330	335	
Gly	His	His	Asn	Glu	Phe	Asp	Asp	Glu	Phe	Glu	Asp	Asp	Asp	Pro	Leu	340	345	350	
Pro	Ala	Ile	Gly	His	Cys	Lys	Ala	Ile	Tyr	Pro	Phe	Asp	Gly	His	Asn	355	360	365	
Glu	Gly	Thr	Leu	Ala	Met	Lys	Glu	Gly	Glu	Val	Leu	Tyr	Ile	Ile	Glu	370	375	380	
Glu	Asp	Lys	Gly	Asp	Gly	Trp	Thr	Arg	Ala	Arg	Arg	Gln	Asn	Gly	Glu	385	390	395	400
Glu	Gly	Tyr	Val	Pro	Thr	Ser	Tyr	Ile	Asp	Val	Thr	Leu	Glu	Lys	Asn	405	410	415	
Ser	Lys	Gly	Ala	Val	Thr	Tyr	Ile	*								420	424		

<210> 1859
 <211> 119
 <212> PRT
 <213> Homo sapiens

<400> 1859


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Met Leu Glu Gln Ile Arg Asn Pro Ser Pro Cys Phe Lys Glu Val Ile
 1           5           10           15
His Lys His Phe Tyr Leu Lys Arg Val Glu Ile Met Ala Gln Cys Glu
           20           25           30
Glu Trp Ile Ala Asp Ile Gln Gln Tyr Ser Ser Asp Lys Arg Val Gly
           35           40           45
Arg Thr Met Ser His His Ala Ala Ala Leu Lys Arg His Thr Ala Gln
           50           55           60
Leu Arg Glu Glu Leu Leu Lys Leu Pro Cys Pro Glu Gly Leu Asp Pro
           65           70           75           80
Asp Thr Asp Asp Ala Pro Glu Val Cys Arg Ala Thr Thr Gly Ala Glu
           85           90           95
Glu Thr Leu Met His Asp Gln Val Lys Pro Ser Ser Ser Lys Glu Leu
           100           105           110
Pro Ser Asp Phe Gln Leu *
           115           118

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<210> 1860
 <211> 724
 <212> PRT
 <213> Homo sapiens

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<400> 1860
Met Glu Glu Glu Gly Leu Glu Cys Pro Asn Ser Ser Ser Glu Lys Arg
 1           5           10           15
Tyr Phe Pro Glu Ser Leu Asp Ser Ser Asp Gly Asp Glu Glu Glu Val
           20           25           30
Leu Ala Cys Glu Asp Leu Glu Leu Asn Pro Phe Asp Gly Leu Pro Tyr
           35           40           45
Ser Ser Arg Tyr Tyr Lys Leu Leu Lys Glu Arg Glu Asp Leu Pro Ile
           50           55           60
Trp Lys Glu Lys Tyr Ser Phe Met Glu Asn Leu Leu Gln Asn Gln Ile
           65           70           75           80
Val Ile Val Ser Gly Asp Ala Lys Cys Gly Lys Ser Ala Gln Val Pro
           85           90           95
Gln Trp Cys Ala Glu Tyr Cys Leu Ser Ile His Tyr Gln His Gly Gly
           100           105           110
Val Ile Cys Thr Gln Val His Lys Gln Thr Met Val Gln Leu Ala Leu
           115           120           125
Arg Val Ala Asp Glu Met Asp Val Asn Ile Gly His Glu Val Gly Tyr
           130           135           140
Val Ile Pro Phe Glu Asn Cys Cys Thr Asn Glu Thr Ile Leu Arg Tyr
           145           150           155           160
Cys Thr Asp Asp Met Leu Gln Arg Glu Met Met Ser Asn Pro Phe Leu
           165           170           175
Gly Ser Tyr Gly Val Ile Ile Leu Asp Asp Ile His Glu Arg Ser Ile
           180           185           190
Ala Thr Asp Val Leu Leu Gly Leu Leu Lys Asp Val Leu Leu Ala Arg
           195           200           205
Pro Glu Leu Lys Leu Ile Ile Asn Ser Ser Pro His Leu Ile Ser Lys
           210           215           220
Leu Asn Ser Tyr Tyr Gly Asn Val Pro Val Ile Glu Val Lys Asn Lys
           225           230           235           240
His Pro Val Glu Val Val Tyr Leu Ser Glu Ala Gln Lys Asp Ser Phe
           245           250           255
Glu Ser Ile Leu Arg Leu Ile Phe Glu Ile His His Ser Gly Glu Lys
           260           265           270
Gly Asp Ile Val Val Phe Leu Ala Cys Glu Gln Asp Ile Glu Lys Val
           275           280           285
Cys Glu Thr Val Tyr Gln Gly Ser Asn Leu Asn Pro Asp Leu Gly Glu
           290           295           300

```


Leu Val Val Val Pro Leu Tyr Pro Lys Glu Lys Cys Ser Leu Phe Lys
 305 310 315 320
 Pro Leu Asp Glu Thr Glu Lys Arg Cys Gln Val Tyr Gln Arg Arg Val
 325 330 335
 Val Leu Thr Thr Ser Ser Gly Glu Phe Leu Ile Trp Ser Asn Ser Val
 340 345 350
 Arg Phe Val Ile Asp Val Gly Val Glu Arg Arg Lys Val Tyr Asn Pro
 355 360 365
 Arg Ile Arg Ala Asn Ser Leu Val Met Gln Pro Ile Ser Gln Ser Gln
 370 375 380
 Ala Glu Ile Arg Lys Gln Ile Leu Gly Ser Ser Ser Ser Gly Lys Phe
 385 390 395 400
 Phe Cys Leu Tyr Thr Glu Glu Phe Ala Ser Lys Asp Met Thr Pro Leu
 405 410 415
 Lys Pro Ala Glu Met Gln Glu Ala Asn Leu Thr Ser Met Val Leu Phe
 420 425 430
 Met Lys Arg Ile Asp Ile Ala Gly Leu Gly His Cys Asp Phe Met Asn
 435 440 445
 Arg Pro Ala Pro Glu Ser Leu Met Gln Ala Leu Glu Asp Leu Asp Tyr
 450 455 460
 Leu Ala Ala Leu Asp Asn Asp Gly Asn Leu Ser Glu Phe Gly Ile Ile
 465 470 475 480
 Met Ser Glu Phe Pro Leu Asp Pro Gln Leu Ser Lys Ser Ile Leu Ala
 485 490 495
 Ser Cys Glu Phe Asp Cys Val Asp Glu Val Leu Thr Ile Ala Ala Met
 500 505 510
 Val Thr Ala Pro Asn Cys Phe Ser His Val Pro His Gly Ala Glu Glu
 515 520 525
 Ala Ala Leu Thr Cys Trp Lys Thr Phe Leu His Pro Glu Gly Asp His
 530 535 540
 Phe Thr Leu Ile Ser Ile Tyr Lys Ala Tyr Gln Asp Thr Thr Leu Asn
 545 550 555 560
 Ser Ser Ser Glu Tyr Cys Val Glu Lys Trp Cys Arg Asp Tyr Phe Leu
 565 570 575
 Asn Cys Ser Ala Leu Arg Met Ala Asp Val Ile Arg Ala Glu Leu Leu
 580 585 590
 Glu Ile Ile Lys Arg Ile Glu Leu Pro Tyr Ala Glu Pro Ala Phe Gly
 595 600 605
 Ser Lys Glu Asn Thr Leu Asn Ile Lys Lys Ala Leu Leu Ser Gly Tyr
 610 615 620
 Phe Met Gln Ile Ala Arg Asp Val Asp Gly Ser Gly Asn Tyr Leu Met
 625 630 635 640
 Leu Thr His Lys Gln Val Ala Gln Leu His Pro Leu Ser Gly Tyr Ser
 645 650 655
 Ile Thr Lys Lys Met Pro Glu Trp Val Leu Phe His Lys Phe Ser Ile
 660 665 670
 Ser Glu Asn Asn Tyr Ile Arg Ile Thr Ser Glu Ile Ser Pro Glu Leu
 675 680 685
 Phe Met Gln Leu Val Pro Gln Tyr Tyr Phe Ser Asn Leu Pro Pro Ser
 690 695 700
 Glu Ser Lys Asp Ile Leu Gln Gln Val Val Gly Ser Pro Ile Pro Cys
 705 710 715 720
 Val Asn Asn Glu
 724

<210> 1861

<211> 1698

<212> PRT

<213> Homo sapiens

<400> 1861

Met	Met	Ala	Gln	Phe	Pro	Thr	Ala	Met	Asn	Gly	Gly	Pro	Asn	Met	Trp
1				5					10					15	
Ala	Ile	Thr	Ser	Glu	Glu	Arg	Thr	Lys	His	Asp	Arg	Gln	Phe	Asp	Asn
			20					25					30		
Leu	Lys	Pro	Ser	Gly	Gly	Tyr	Ile	Thr	Gly	Asp	Gln	Ala	Arg	Asn	Phe
		35					40					45			
Phe	Leu	Gln	Ser	Gly	Leu	Pro	Ala	Pro	Val	Leu	Ala	Glu	Ile	Trp	Ala
	50					55					60				
Leu	Ser	Asp	Leu	Asn	Lys	Asp	Gly	Lys	Met	Asp	Gln	Gln	Glu	Phe	Ser
65				70					75					80	
Ile	Ala	Met	Lys	Leu	Ile	Lys	Leu	Lys	Leu	Gln	Gly	Gln	Gln	Leu	Pro
			85					90						95	
Val	Val	Leu	Pro	Pro	Ile	Met	Lys	Gln	Pro	Pro	Met	Phe	Ser	Pro	Leu
		100						105					110		
Ile	Ser	Ala	Arg	Phe	Gly	Met	Gly	Ser	Met	Pro	Asn	Leu	Ser	Ile	Pro
	115					120					125				
Gln	Pro	Leu	Pro	Pro	Ala	Ala	Pro	Ile	Thr	Ser	Leu	Ser	Ser	Ala	Thr
	130					135					140				
Ser	Gly	Thr	Asn	Leu	Pro	Pro	Leu	Met	Met	Pro	Thr	Pro	Leu	Val	Pro
145				150					155					160	
Ser	Val	Ser	Thr	Ser	Ser	Leu	Pro	Asn	Gly	Thr	Ala	Ser	Leu	Ile	Gln
			165					170						175	
Pro	Leu	Pro	Ile	Pro	Tyr	Ser	Ser	Ser	Thr	Leu	Pro	His	Gly	Ser	Ser
		180						185					190		
Tyr	Ser	Leu	Met	Met	Gly	Gly	Phe	Gly	Gly	Ala	Ser	Ile	Gln	Lys	Ala
	195					200						205			
Gln	Ser	Leu	Ile	Asp	Leu	Gly	Ser	Ser	Ser	Ser	Thr	Ser	Ser	Thr	Ala
	210					215					220				
Ser	Leu	Ser	Gly	Asn	Ser	Pro	Lys	Thr	Gly	Thr	Ser	Glu	Trp	Ala	Val
225				230					235					240	
Pro	Gln	Pro	Thr	Arg	Leu	Lys	Tyr	Arg	Gln	Lys	Phe	Asn	Thr	Leu	Asp
			245					250						255	
Lys	Ser	Met	Ser	Gly	Tyr	Leu	Ser	Gly	Phe	Gln	Ala	Arg	Asn	Ala	Leu
		260						265					270		
Leu	Gln	Ser	Asn	Leu	Ser	Gln	Thr	Gln	Leu	Ala	Thr	Ile	Trp	Thr	Leu
	275					280						285			
Ala	Asp	Val	Asp	Gly	Asp	Gly	Gln	Leu	Lys	Ala	Glu	Glu	Phe	Ile	Leu
	290					295					300				
Ala	Met	His	Leu	Thr	Asp	Met	Ala	Lys	Ala	Gly	Gln	Pro	Leu	Pro	Leu
305					310					315				320	
Thr	Leu	Pro	Pro	Glu	Leu	Val	Pro	Pro	Ser	Phe	Arg	Gly	Gly	Lys	Gln
			325					330						335	
Ile	Asp	Ser	Ile	Asn	Gly	Thr	Leu	Pro	Ser	Tyr	Gln	Lys	Met	Gln	Glu
		340						345					350		
Glu	Glu	Pro	Gln	Lys	Lys	Leu	Pro	Val	Thr	Phe	Glu	Asp	Lys	Arg	Lys
	355					360						365			
Ala	Asn	Tyr	Glu	Arg	Gly	Asn	Met	Glu	Leu	Glu	Lys	Arg	Arg	Gln	Ala
	370					375					380				
Leu	Met	Glu	Gln	Gln	Gln	Arg	Glu	Ala	Glu	Arg	Lys	Ala	Gln	Lys	Glu
385				390						395				400	
Lys	Glu	Glu	Trp	Glu	Arg	Lys	Gln	Arg	Glu	Leu	Gln	Glu	Gln	Glu	Trp
			405					410						415	
Lys	Lys	Gln	Leu	Glu	Leu	Glu	Lys	Arg	Leu	Glu	Lys	Gln	Arg	Glu	Leu
		420						425					430		
Glu	Arg	Gln	Arg	Glu	Glu	Glu	Arg	Arg	Lys	Asp	Ile	Glu	Arg	Arg	Glu
	435					440						445			
Ala	Ala	Lys	Gln	Glu	Leu	Glu	Arg	Gln	Arg	Arg	Leu	Glu	Trp	Glu	Arg
	450					455					460				
Ile	Arg	Arg	Gln	Glu	Leu	Leu	Asn	Gln	Lys	Asn	Arg	Glu	Gln	Glu	Glu
465				470					475					480	
Ile	Val	Arg	Leu	Asn	Ser	Lys	Lys	Lys	Asn	Leu	His	Leu	Glu	Leu	Glu
			485					490					495		
Ala	Leu	Asn	Gly	Lys	His	Gln	Gln	Ile	Ser	Gly	Arg	Leu	Gln	Asp	Val
		500						505					510		

Arg	Leu	Lys	Lys	Gln	Thr	Gln	Lys	Thr	Glu	Leu	Glu	Val	Leu	Asp	Lys	515	520	525
Gln	Cys	Asp	Leu	Glu	Ile	Met	Glu	Ile	Lys	Gln	Leu	Gln	Gln	Glu	Leu	530	535	540
Gln	Glu	Tyr	Gln	Asn	Lys	Leu	Ile	Tyr	Leu	Val	Pro	Glu	Lys	Gln	Leu	545	550	555
Leu	Asn	Glu	Arg	Ile	Lys	Asn	Met	Gln	Phe	Ser	Asn	Thr	Pro	Asp	Ser	565	570	575
Gly	Val	Ser	Leu	Leu	His	Lys	Lys	Ser	Leu	Glu	Lys	Glu	Glu	Leu	Cys	580	585	590
Gln	Arg	Leu	Lys	Glu	Gln	Leu	Asp	Ala	Leu	Glu	Lys	Glu	Thr	Ala	Ser	595	600	605
Lys	Leu	Ser	Glu	Met	Asp	Ser	Phe	Asn	Asn	Gln	Leu	Lys	Cys	Gly	Asn	610	615	620
Met	Asp	Asp	Ser	Val	Leu	Gln	Cys	Leu	Leu	Ser	Leu	Leu	Ser	Cys	Leu	625	630	635
Asn	Asn	Leu	Phe	Leu	Leu	Leu	Lys	Glu	Leu	Arg	Glu	Thr	Tyr	Asn	Thr	645	650	655
Gln	Gln	Leu	Ala	Leu	Glu	Gln	Leu	Tyr	Lys	Ile	Lys	Arg	Asp	Lys	Leu	660	665	670
Lys	Glu	Ile	Glu	Arg	Lys	Arg	Leu	Glu	Leu	Met	Gln	Lys	Lys	Lys	Leu	675	680	685
Glu	Asp	Glu	Ala	Ala	Arg	Lys	Ala	Lys	Gln	Gly	Lys	Glu	Asn	Leu	Trp	690	695	700
Lys	Glu	Asn	Leu	Arg	Lys	Glu	Glu	Glu	Glu	Lys	Gln	Lys	Arg	Leu	Gln	705	710	715
Glu	Glu	Lys	Thr	Gln	Glu	Lys	Ile	Gln	Glu	Glu	Arg	Lys	Ala	Glu		725	730	735
Glu	Lys	Gln	Arg	Lys	Asp	Lys	Asp	Thr	Leu	Lys	Ala	Glu	Glu	Lys	Lys	740	745	750
Arg	Glu	Thr	Ala	Ser	Val	Leu	Val	Asn	Tyr	Arg	Ala	Leu	Tyr	Pro	Phe	755	760	765
Glu	Ala	Arg	Asn	His	Asp	Glu	Met	Ser	Phe	Asn	Ser	Gly	Asp	Ile	Ile	770	775	780
Gln	Val	Asp	Glu	Lys	Thr	Val	Gly	Glu	Pro	Gly	Trp	Leu	Tyr	Gly	Ser	785	790	795
Phe	Gln	Gly	Asn	Phe	Gly	Trp	Phe	Pro	Cys	Asn	Tyr	Val	Glu	Lys	Met	805	810	815
Pro	Ser	Ser	Glu	Asn	Glu	Lys	Ala	Val	Ser	Pro	Lys	Lys	Ala	Leu	Leu	820	825	830
Pro	Pro	Thr	Val	Ser	Leu	Ser	Ala	Thr	Ser	Thr	Ser	Ser	Glu	Pro	Leu	835	840	845
Ser	Ser	Asn	Gln	Pro	Ala	Ser	Val	Thr	Asp	Tyr	Gln	Asn	Val	Ser	Phe	850	855	860
Ser	Asn	Leu	Thr	Val	Asn	Thr	Ser	Trp	Gln	Lys	Lys	Ser	Ala	Phe	Thr	865	870	875
Arg	Thr	Val	Ser	Pro	Gly	Ser	Val	Ser	Pro	Ile	His	Gly	Gln	Gly	Gln	885	890	895
Val	Val	Glu	Asn	Leu	Lys	Ala	Gln	Ala	Leu	Cys	Ser	Trp	Thr	Ala	Lys	900	905	910
Lys	Asp	Asn	His	Leu	Asn	Phe	Ser	Lys	His	Asp	Ile	Ile	Thr	Val	Leu	915	920	925
Glu	Gln	Gln	Glu	Asn	Trp	Trp	Phe	Gly	Glu	Val	His	Gly	Gly	Arg	Gly	930	935	940
Trp	Phe	Pro	Lys	Ser	Tyr	Val	Lys	Ile	Ile	Pro	Gly	Ser	Glu	Val	Lys	945	950	955
Arg	Glu	Glu	Pro	Glu	Ala	Leu	Tyr	Ala	Ala	Val	Asn	Lys	Lys	Pro	Thr	965	970	975
Ser	Ala	Ala	Tyr	Ser	Val	Gly	Glu	Glu	Tyr	Ile	Ala	Leu	Tyr	Pro	Tyr	980	985	990
Ser	Ser	Val	Glu	Pro	Gly	Asp	Leu	Thr	Phe	Thr	Glu	Gly	Glu	Glu	Ile	995	1000	1005
Leu	Val	Thr	Gln	Lys	Asp	Gly	Glu	Trp	Trp	Thr	Gly	Ser	Ile	Gly	Asp	1010	1015	1020

Arg Ser Gly Ile Phe Pro Ser Asn Tyr Val Lys Pro Lys Asp Gln Glu
1025 1030 1035 1040
Ser Phe Gly Ser Ala Ser Lys Ser Gly Ala Ser Asn Lys Lys Pro Glu
1045 1050 1055
Ile Ala Gln Val Thr Ser Ala Tyr Val Ala Ser Gly Ser Glu Gln Leu
1060 1065 1070
Ser Leu Ala Pro Gly Gln Leu Ile Leu Ile Leu Lys Lys Asn Thr Ser
1075 1080 1085
Gly Trp Trp Gln Gly Glu Leu Gln Ala Arg Gly Lys Lys Arg Gln Lys
1090 1095 1100
Gly Trp Phe Pro Ala Ser His Val Lys Leu Leu Gly Pro Ser Ser Glu
1105 1110 1115 1120
Arg Ala Thr Pro Ala Phe His Pro Val Cys Gln Val Ile Ala Met Tyr
1125 1130 1135
Asp Tyr Ala Ala Asn Asn Glu Asp Glu Leu Ser Phe Ser Lys Gly Gln
1140 1145 1150
Leu Ile Asn Val Met Asn Lys Asp Asp Pro Asp Trp Trp Gln Gly Glu
1155 1160 1165
Ile Asn Gly Val Thr Gly Leu Phe Pro Ser Asn Tyr Val Lys Met Thr
1170 1175 1180
Thr Asp Ser Asp Pro Ser Gln Gln Trp Cys Ala Asp Leu Gln Thr Leu
1185 1190 1195 1200
Asp Thr Met Gln Pro Ile Glu Arg Lys Arg Gln Gly Tyr Ile His Glu
1205 1210 1215
Leu Ile Gln Thr Glu Glu Arg Tyr Met Ala Asp Leu Gln Leu Val Val
1220 1225 1230
Glu Val Phe Gln Lys Arg Met Ala Glu Ser Gly Phe Leu Thr Glu Gly
1235 1240 1245
Glu Met Ala Leu Ile Phe Val Asn Trp Lys Glu Leu Ile Met Ser Asn
1250 1255 1260
Thr Lys Leu Leu Lys Ala Leu Arg Val Arg Lys Lys Thr Gly Gly Glu
1265 1270 1275 1280
Lys Met Pro Val Gln Met Ile Gly Asp Ile Leu Ala Ala Glu Leu Ser
1285 1290 1295
His Met Gln Ala Tyr Ile Arg Phe Cys Ser Cys Gln Leu Asn Gly Ala
1300 1305 1310
Ala Leu Leu Gln Gln Lys Thr Asp Glu Asp Thr Asp Phe Lys Glu Phe
1315 1320 1325
Leu Lys Lys Leu Ala Ser Asp Pro Arg Cys Lys Gly Met Pro Leu Ser
1330 1335 1340
Ser Phe Leu Leu Lys Pro Met Gln Arg Ile Thr Arg Tyr Pro Leu Leu
1345 1350 1355 1360
Ile Arg Ser Ile Leu Glu Asn Thr Pro Glu Ser His Ala Asp His Ser
1365 1370 1375
Ser Leu Lys Leu Ala Leu Glu Arg Ala Glu Glu Leu Cys Ser Gln Val
1380 1385 1390
Asn Glu Gly Val Arg Glu Lys Glu Asn Ser Asp Arg Leu Glu Trp Ile
1395 1400 1405
Gln Ala His Val Gln Cys Glu Gly Leu Ala Glu Gln Leu Ile Phe Asn
1410 1415 1420
Ser Leu Thr Asn Cys Leu Gly Pro Arg Lys Leu Leu His Ser Gly Lys
1425 1430 1435 1440
Leu Tyr Lys Thr Lys Ser Asn Lys Glu Leu His Gly Phe Leu Phe Asn
1445 1450 1455
Asp Phe Leu Leu Leu Thr Tyr Met Val Lys Gln Phe Ala Val Ser Ser
1460 1465 1470
Gly Ser Glu Lys Leu Phe Ser Ser Lys Ser Asn Ala Gln Phe Lys Met
1475 1480 1485
Tyr Lys Thr Pro Ile Phe Leu Asn Glu Val Leu Val Lys Leu Pro Thr
1490 1495 1500
Asp Pro Ser Ser Asp Glu Pro Val Phe His Ile Ser His Ile Asp Arg
1505 1510 1515 1520
Val Tyr Thr Leu Arg Thr Asp Asn Ile Asn Glu Arg Thr Thr Trp Val
1525 1530 1535

Gln Lys Ile Lys Ala Ala Ser Glu Gln Tyr Ile Asp Thr Glu Lys Lys
 1540 1545 1550
 Lys Arg Glu Lys Ala Tyr Gln Ala Arg Ser Gln Lys Thr Ser Gly Ile
 1555 1560 1565
 Gly Arg Leu Met Val His Val Ile Glu Ala Thr Glu Leu Lys Ala Cys
 1570 1575 1580
 Lys Pro Asn Gly Lys Ser Asn Pro Tyr Cys Glu Ile Ser Met Gly Ser
 1585 1590 1595 1600
 Gln Ser Tyr Thr Thr Arg Thr Ile Gln Asp Thr Leu Asn Pro Lys Trp
 1605 1610 1615
 Asn Phe Asn Cys Gln Phe Phe Ile Lys Asp Leu Tyr Gln Asp Val Leu
 1620 1625 1630
 Cys Leu Thr Leu Phe Asp Arg Asp Gln Phe Ser Pro Asp Asp Phe Leu
 1635 1640 1645
 Gly Arg Thr Glu Ile Pro Val Ala Lys Ile Arg Thr Glu Gln Glu Ser
 1650 1655 1660
 Lys Gly Pro Met Thr Arg Arg Leu Leu Leu His Glu Val Pro Thr Gly
 1665 1670 1675 1680
 Glu Val Trp Val Arg Phe Asp Leu Gln Leu Phe Glu Gln Lys Thr Leu
 1685 1690 1695
 Leu *
 1697

<210> 1862
 <211> 446
 <212> PRT
 <213> Homo sapiens

<400> 1862
 Met Met Glu Glu Ser Gly Ile Glu Thr Thr Pro Pro Gly Thr Pro Pro
 1 5 10 15
 Pro Asn Pro Ala Gly Leu Ala Ala Thr Ala Met Ser Ser Thr Pro Val
 20 25 30
 Pro Leu Ala Ala Thr Ser Ser Phe Ser Ser Pro Asn Val Ser Ser Met
 35 40 45
 Glu Ser Phe Pro Pro Leu Ala Tyr Ser Thr Pro Gln Pro Pro Leu Pro
 50 55 60
 Pro Val Arg Pro Ser Ala Pro Leu Pro Phe Val Pro Pro Pro Ala Val
 65 70 75 80
 Pro Ser Val Pro Pro Leu Val Thr Ser Met Pro Pro Pro Val Ser Pro
 85 90 95
 Ser Thr Ala Ala Ala Phe Gly Asn Pro Pro Val Ser His Phe Pro Pro
 100 105 110
 Ser Thr Ser Ala Pro Asn Thr Leu Leu Pro Ala Pro Pro Ser Gly Pro
 115 120 125
 Pro Ile Ser Gly Phe Ser Val Gly Ser Thr Tyr Asp Ile Thr Arg Gly
 130 135 140
 His Ala Gly Arg Ala Pro Gln Thr Pro Leu Met Pro Ser Phe Ser Ala
 145 150 155 160
 Pro Ser Gly Thr Gly Leu Leu Pro Thr Pro Ile Thr Gln Gln Ala Ser
 165 170 175
 Leu Thr Ser Leu Ala Gln Gly Thr Gly Thr Thr Ser Ala Ile Thr Phe
 180 185 190
 Pro Glu Glu Gln Glu Asp Pro Arg Ile Thr Arg Gly Gln Asp Glu Ala
 195 200 205
 Ser Ala Gly Gly Ile Trp Gly Phe Ile Lys Gly Val Ala Gly Asn Pro
 210 215 220
 Met Val Lys Ser Val Leu Asp Lys Thr Lys His Ser Val Glu Ser Met
 225 230 235 240
 Ile Thr Thr Leu Asp Pro Gly Met Ala Pro Tyr Ile Lys Ser Gly Gly
 245 250 255

Glu	Leu	Asp	Ile	Val	Val	Thr	Ser	Asn	Lys	Glu	Val	Lys	Val	Ala	Ala
			260					265					270		
Val	Arg	Asp	Ala	Phe	Gln	Glu	Val	Phe	Gly	Leu	Ala	Val	Val	Val	Gly
		275						280					285		
Glu	Ala	Gly	Gln	Ser	Asn	Ile	Ala	Pro	Gln	Pro	Val	Gly	Tyr	Ala	Ala
		290				295					300				
Gly	Leu	Lys	Gly	Ala	Gln	Glu	Arg	Ile	Asp	Ser	Leu	Arg	Arg	Thr	Gly
305					310					315					320
Val	Ile	His	Glu	Lys	Gln	Thr	Ala	Val	Ser	Val	Glu	Asn	Phe	Ile	Ala
				325					330					335	
Glu	Leu	Leu	Pro	Asp	Lys	Trp	Phe	Asp	Ile	Gly	Cys	Leu	Val	Val	Glu
			340					345					350		
Asp	Pro	Val	His	Gly	Ile	His	Leu	Glu	Thr	Phe	Thr	Gln	Ala	Thr	Pro
		355					360					365			
Val	Pro	Leu	Glu	Phe	Val	Gln	Gln	Ala	Gln	Ser	Leu	Thr	Pro	Gln	Asp
		370				375					380				
Tyr	Asn	Leu	Arg	Trp	Ser	Gly	Leu	Leu	Val	Thr	Val	Gly	Glu	Val	Leu
385					390					395					400
Glu	Lys	Ser	Leu	Leu	Asn	Val	Ser	Arg	Thr	Asp	Trp	His	Met	Ala	Phe
				405					410					415	
Thr	Gly	Met	Ser	Arg	Arg	Gln	Met	Ile	Tyr	Ser	Ala	Ala	Arg	Ala	Ile
			420					425					430		
Ala	Gly	Met	Tyr	Lys	Gln	Arg	Leu	Pro	Pro	Arg	Thr	Val	*		
		435					440					445			

<210> 1863

<211> 352

<212> PRT

<213> Homo sapiens

<400> 1863

Met	Ala	Leu	Pro	Phe	Gln	Lys	Glu	Leu	Glu	Lys	Tyr	Lys	Asn	Ile	Asp
1				5					10					15	
Glu	Asp	Glu	Leu	Leu	Gly	Lys	Leu	Ser	Glu	Glu	Glu	Leu	Lys	Gln	Leu
			20					25					30		
Glu	Asn	Val	Leu	Asp	Asp	Leu	Asp	Pro	Glu	Ser	Ala	Met	Leu	Pro	Ala
		35				40						45			
Gly	Phe	Arg	Gln	Lys	Asp	Gln	Thr	Gln	Lys	Ala	Ala	Thr	Gly	Pro	Phe
	50				55						60				
Asp	Arg	Glu	His	Leu	Leu	Met	Tyr	Leu	Glu	Lys	Glu	Ala	Leu	Glu	Gln
	65			70					75					80	
Lys	Asp	Arg	Glu	Asp	Phe	Val	Pro	Phe	Thr	Gly	Glu	Lys	Lys	Gly	Arg
			85					90						95	
Val	Phe	Ile	Pro	Lys	Glu	Lys	Pro	Ile	Glu	Thr	Arg	Lys	Glu	Glu	Lys
			100					105					110		
Val	Thr	Leu	Asp	Pro	Glu	Leu	Glu	Glu	Ala	Leu	Ala	Ser	Ala	Ser	Asp
	115					120						125			
Thr	Glu	Leu	Tyr	Asp	Leu	Ala	Ala	Val	Leu	Gly	Val	His	Asn	Leu	Leu
	130				135						140				
Asn	Asn	Pro	Lys	Phe	Asp	Glu	Glu	Thr	Ala	Asn	Asn	Lys	Gly	Gly	Lys
145				150					155					160	
Gly	Pro	Val	Arg	Asn	Val	Val	Lys	Gly	Glu	Lys	Val	Lys	Pro	Val	Phe
			165					170					175		
Glu	Glu	Pro	Pro	Asn	Pro	Thr	Asn	Val	Glu	Ile	Ser	Leu	Gln	Gln	Met
		180						185					190		
Lys	Ala	Asn	Asp	Pro	Ser	Leu	Gln	Glu	Val	Asn	Leu	Asn	Asn	Ile	Lys
	195					200					205				
Asn	Ile	Pro	Ile	Pro	Thr	Leu	Arg	Glu	Phe	Ala	Lys	Ala	Leu	Glu	Thr
	210				215						220				
Asn	Thr	His	Val	Lys	Lys	Phe	Ser	Leu	Ala	Ala	Thr	Arg	Ser	Asn	Asp
225				230						235					240


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Pro Val Ala Ile Ala Phe Ala Asp Met Leu Lys Val Asn Lys Thr Leu
      245      250      255
Thr Ser Leu Asn Ile Glu Ser Asn Phe Ile Thr Gly Thr Gly Ile Leu
      260      265      270
Ala Leu Val Glu Ala Leu Lys Glu Asn Asp Thr Leu Thr Glu Ile Lys
      275      280      285
Ile Asp Asn Gln Arg Gln Gln Leu Gly Thr Ala Val Glu Met Glu Ile
      290      295      300
Ala Gln Met Leu Glu Glu Asn Ser Arg Ile Leu Lys Phe Gly Tyr Gln
305      310      315      320
Phe Thr Lys Gln Gly Pro Arg Thr Arg Val Ala Ala Ala Ile Thr Lys
      325      330      335
Asn Asn Asp Leu Val Arg Lys Lys Arg Val Glu Ala Asp Arg Arg *
      340      345      350 351

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<210> 1864
<211> 205
<212> PRT
<213> Homo sapiens

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<400> 1864
Met Asp Val Ala Glu Ser Pro Glu Arg Asp Pro His Ser Pro Glu Asp
 1      5      10      15
Glu Glu Gln Pro Gln Gly Leu Ser Asp Asp Asp Ile Leu Arg Asp Ser
      20      25      30
Gly Ser Asp Gln Asp Leu Asp Gly Ala Gly Val Arg Ala Ser Asp Leu
      35      40      45
Glu Asp Glu Glu Ser Ala Ala Arg Gly Pro Ser Gln Glu Glu Glu Asp
      50      55      60
Asn His Ser Asp Glu Glu Asp Arg Ala Ser Glu Pro Lys Ser Gln Asp
65      70      75      80
Gln Asp Ser Glu Val Asn Glu Leu Ser Arg Gly Pro Thr Ser Ser Pro
      85      90      95
Cys Glu Glu Glu Gly Asp Glu Gly Glu Glu Asp Arg Thr Ser Asp Leu
      100      105      110
Arg Asp Glu Ala Ser Ser Val Thr Arg Glu Leu Asp Glu His Glu Leu
      115      120      125
Asp Tyr Asp Glu Glu Val Pro Glu Glu Pro Ala Pro Ala Val Gln Glu
      130      135      140
Asp Glu Ala Glu Lys Ala Gly Ala Glu Asp Asp Glu Glu Lys Gly Glu
145      150      155      160
Gly Thr Pro Arg Glu Glu Gly Lys Ala Gly Val Gln Ser Val Gly Glu
      165      170      175
Lys Glu Ser Leu Glu Ala Ala Lys Glu Lys Lys Lys Glu Asp Asp Asp
      180      185      190
Gly Glu Ile Glu Phe Ser Ser Ser Arg Arg Pro Leu *
      195      200      204

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<210> 1865
<211> 510
<212> PRT
<213> Homo sapiens

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<400> 1865
Met Asn Glu Asn Lys Asp Thr Asp Ser Lys Lys Ser Glu Glu Tyr Glu
 1      5      10      15
Asp Asp Phe Glu Lys Asp Leu Glu Trp Leu Ile Asn Glu Asn Glu Lys
      20      25      30

```


Ser Asp Ala Ser Ile Ile Glu Met Ala Cys Glu Lys Glu Glu Asn Ile
 35 40 45
 Asn Gln Asp Leu Lys Glu Asn Glu Thr Val Met Glu His Thr Lys Arg
 50 55 60
 His Ser Asp Pro Asp Lys Ser Leu Gln Asp Glu Val Ser Pro Arg Arg
 65 70 75 80
 Asn Asp Ile Ile Ser Val Pro Gly Ile Gln Pro Leu Asp Pro Ile Ser
 85 90 95
 Asp Ser Asp Ser Glu Asn Ser Phe Gln Glu Ser Lys Leu Glu Ser Gln
 100 105 110
 Lys Asp Leu Glu Glu Glu Glu Asp Glu Glu Val Arg Arg Tyr Ile Met
 115 120 125
 Glu Lys Ile Val Gln Ala Asn Lys Leu Leu Gln Asn Gln Glu Pro Val
 130 135 140
 Asn Asp Lys Arg Glu Arg Lys Leu Lys Phe Lys Asp Gln Leu Val Asp
 145 150 155 160
 Leu Glu Val Pro Pro Leu Glu Asp Thr Thr Thr Phe Lys Asn Tyr Phe
 165 170 175
 Glu Asn Glu Arg Asn Met Phe Gly Lys Leu Ser Gln Leu Cys Ile Ser
 180 185 190
 Asn Asp Phe Gly Gln Glu Asp Val Leu Leu Ser Leu Thr Asn Gly Ser
 195 200 205
 Cys Glu Glu Asn Lys Asp Arg Thr Ile Leu Val Glu Arg Asp Gly Lys
 210 215 220
 Phe Glu Leu Leu Asn Leu Gln Asp Ile Ala Ser Gln Gly Phe Leu Pro
 225 230 235 240
 Pro Ile Asn Asn Ala Asn Ser Thr Glu Asn Asp Pro Gln Gln Leu Leu
 245 250 255
 Pro Arg Ser Ser Asn Ser Ser Val Ser Gly Thr Lys Lys Glu Asp Ser
 260 265 270
 Thr Ala Lys Ile His Ala Val Thr His Ser Ser Thr Gly Glu Pro Leu
 275 280 285
 Ala Tyr Ile Ala Gln Pro Pro Leu Asn Arg Lys Thr Cys Pro Ser Ser
 290 295 300
 Ala Val Asn Ser Asp Arg Ser Lys Gly Asn Gly Lys Ser Asn His Arg
 305 310 315 320
 Thr Gln Ser Ala His Ile Ser Pro Val Thr Ser Thr Tyr Cys Leu Ser
 325 330 335
 Pro Arg Gln Lys Glu Leu Gln Lys Gln Leu Glu Glu Lys Arg Glu Lys
 340 345 350
 Leu Lys Arg Glu Glu Glu Arg Arg Lys Ile Glu Glu Glu Lys Glu Lys
 355 360 365
 Lys Arg Glu Asn Asp Ile Val Phe Lys Ala Trp Leu Gln Lys Lys Arg
 370 375 380
 Glu Gln Val Leu Glu Met Arg Arg Ile Gln Arg Ala Lys Glu Ile Glu
 385 390 395 400
 Asp Met Asn Ser Arg Gln Glu Asn Arg Asp Pro Gln Gln Ala Phe Arg
 405 410 415
 Leu Trp Leu Lys Lys Lys His Glu Glu Gln Met Lys Glu Arg Gln Thr
 420 425 430
 Glu Glu Leu Arg Lys Gln Glu Glu Cys Leu Phe Phe Leu Lys Gly Thr
 435 440 445
 Glu Gly Arg Glu Arg Ala Phe Lys Gln Trp Leu Arg Arg Lys Arg Met
 450 455 460
 Glu Lys Met Ala Glu Gln Gln Ala Val Arg Glu Arg Thr Arg Gln Leu
 465 470 475 480
 Arg Leu Glu Ala Lys Arg Ser Lys Gln Leu Gln His His Leu Tyr Met
 485 490 495
 Ser Glu Ala Lys Pro Phe Arg Phe Thr Asp His Tyr Asn *
 500 505 509

<211> 80
 <212> PRT
 <213> Homo sapiens

<400> 1866
 Met Ser Lys Asp Leu Val Thr Phe Gly Asp Val Ala Val Asn Phe Ser
 1 5 10 15
 Gln Glu Glu Trp Glu Trp Leu Asn Pro Ala Gln Arg Asn Leu Tyr Arg
 20 25 30
 Lys Val Met Leu Glu Asn Tyr Arg Ser Leu Val Ser Leu Gly Val Ser
 35 40 45
 Val Ser Lys Pro Asp Val Ile Ser Leu Leu Glu Gln Gly Lys Glu Pro
 50 55 60
 Trp Met Val Lys Lys Glu Gly Thr Arg Gly Pro Cys Pro Gly Glu *
 65 70 75 79

<210> 1867
 <211> 71
 <212> PRT
 <213> Homo sapiens

<400> 1867
 Met Ala Val Ala Ser Asp Phe Tyr Leu Arg Tyr Tyr Val Gly His Lys
 1 5 10 15
 Gly Lys Phe Gly His Glu Phe Leu Glu Phe Glu Phe Arg Pro Asp Gly
 20 25 30
 Glu Lys Arg Pro Thr Ala Arg Gly Ala Gly Lys Gly Glu Arg Asp Arg
 35 40 45
 Glu Ala Gly Trp Cys Gly Gly Tyr Arg Arg Arg Arg Pro Leu Leu Pro
 50 55 60
 Ser Lys Glu Ile Gly Ala *
 65 70

<210> 1868
 <211> 210
 <212> PRT
 <213> Homo sapiens

<400> 1868
 Met Gln Pro Leu Thr Lys Asp Ala Gly Met Ser Leu Ser Ser Val Thr
 1 5 10 15
 Leu Ala Ser Ala Leu Gln Val Arg Gly Glu Ala Leu Ser Glu Glu Glu
 20 25 30
 Ile Trp Ser Leu Leu Phe Leu Ala Ala Glu Gln Leu Leu Glu Asp Leu
 35 40 45
 Arg Asn Asp Ser Ser Asp Tyr Val Val Cys Pro Trp Ser Ala Leu Leu
 50 55 60
 Ser Ala Ala Gly Ser Leu Ser Phe Gln Gly Arg Val Ser His Ile Glu
 65 70 75 80
 Ala Ala Pro Phe Lys Ala Pro Glu Leu Leu Gln Gly Gln Ser Glu Asp
 85 90 95
 Glu Gln Pro Asp Ala Ser Gln Met His Val Tyr Ser Leu Gly Met Thr
 100 105 110
 Leu Tyr Trp Ser Ala Gly Phe His Val Pro Pro His Gln Pro Leu Gln
 115 120 125
 Leu Cys Glu Pro Leu His Ser Ile Leu Leu Thr Met Cys Glu Asp Gln
 130 135 140

Pro His Arg Arg Cys Thr Leu Gln Ser Val Leu Glu Ala Cys Arg Val
 145 150 155 160
 His Glu Lys Glu Val Ser Val Tyr Pro Ala Pro Ala Gly Leu His Ile
 165 170 175
 Arg Arg Leu Val Gly Leu Val Leu Gly Thr Ile Ser Glu Val Ser Arg
 180 185 190
 Glu Pro Cys Phe Ser Ser Ser Ser Cys Trp Ser Cys Val Ala Ile Lys
 195 200 205
 Ile *
 209

<210> 1869
 <211> 439
 <212> PRT
 <213> Homo sapiens

<400> 1869
 Met Ser Leu Val Asp Leu Gly Lys Arg Leu Leu Glu Ala Ala Arg Lys
 1 5 10 15
 Gly Gln Asp Asp Glu Val Arg Thr Leu Met Ala Asn Gly Ala Pro Phe
 20 25 30
 Thr Thr Asp Trp Phe Ser Lys Leu Arg Val Ser Cys Gly Tyr Ile Gly
 35 40 45
 Asp Asn Cys Lys Asn Gly Ala Asp Val Asn Ala Lys Asp Met Leu Lys
 50 55 60
 Met Thr Ala Leu His Trp Ala Thr Glu Arg His His Arg Asp Val Val
 65 70 75 80
 Glu Leu Leu Ile Lys Tyr Gly Ala Asp Val His Ala Phe Ser Lys Phe
 85 90 95
 Asp Lys Ser Ala Phe Asp Ile Ala Leu Glu Lys Asn Asn Ala Glu Ile
 100 105 110
 Leu Val Ile Leu Gln Glu Ala Met Gln Asn Gln Val Asn Val Asn Pro
 115 120 125
 Glu Arg Ala Asn Pro Val Thr Asp Pro Val Ser Met Ala Ala Pro Phe
 130 135 140
 Ile Phe Thr Ser Gly Glu Val Val Asn Leu Ala Ser Leu Ile Ser Ser
 145 150 155 160
 Thr Asn Thr Lys Thr Thr Ser Gly Asp Pro His Ala Ser Thr Val Gln
 165 170 175
 Phe Ser Asn Ser Thr Thr Ser Val Leu Ala Thr Leu Ala Ala Leu Ala
 180 185 190
 Glu Ala Ser Val Pro Leu Ser Asn Ser His Arg Ala Thr Ala Asn Thr
 195 200 205
 Glu Glu Ile Ile Glu Gly Asn Ser Val Asp Ser Ser Ile Gln Gln Val
 210 215 220
 Met Gly Ser Gly Gly Gln Arg Val Ile Thr Ile Val Thr Asp Gly Val
 225 230 235 240
 Pro Leu Gly Asn Ile Gln Thr Ser Ile Pro Thr Gly Gly Ile Gly Gln
 245 250 255
 Pro Phe Ile Val Thr Val Gln Asp Gly Gln Gln Val Leu Thr Val Pro
 260 265 270
 Ala Gly Lys Gly Ala Glu Glu Thr Val Ile Lys Glu Glu Glu Glu Glu
 275 280 285
 Lys Leu Pro Leu Thr Lys Lys Pro Arg Ile Gly Glu Lys Thr Asn Ser
 290 295 300
 Val Glu Glu Ser Lys Glu Gly Asn Glu Arg Glu Leu Leu Gln Gln Gln
 305 310 315 320
 Leu Gln Glu Ala Asn Arg Arg Ala Gln Glu Tyr Arg His Gln Leu Leu
 325 330 335
 Lys Lys Glu Gln Glu Ala Glu Gln Tyr Arg Leu Lys Leu Glu Ala Ile
 340 345 350

Ala Arg Gln Gln Pro Asn Gly Val Asp Phe Thr Met Val Glu Glu Val
 355 360 365
 Ala Glu Val Asp Ala Val Val Val Thr Glu Gly Glu Leu Glu Glu Arg
 370 375 380
 Glu Thr Lys Val Thr Gly Ser Ala Gly Ala Thr Glu Pro His Thr Arg
 385 390 395 400
 Gly Phe His Gly Asn Cys Phe Ile Leu Ile Cys Lys Gly His Asn Leu
 405 410 415
 His Cys Val His Ile Asn Pro Leu Leu Lys Lys Glu Ile Tyr Arg Arg
 420 425 430
 Gln Thr Leu Tyr Lys Asn *
 435 438

<210> 1870
 <211> 445
 <212> PRT
 <213> Homo sapiens

<400> 1870
 Met Ile Glu Asp Asn Lys Glu Asn Lys Asp His Ser Leu Glu Arg Gly
 1 5 10 15
 Arg Ala Ser Leu Ile Phe Ser Leu Lys Asn Glu Val Gly Gly Leu Ile
 20 25 30
 Lys Ala Leu Lys Ile Phe Gln Glu Lys His Val Asn Leu Leu His Ile
 35 40 45
 Glu Ser Arg Lys Ser Lys Arg Arg Asn Ser Glu Phe Glu Ile Phe Val
 50 55 60
 Asp Cys Asp Ile Asn Arg Glu Gln Leu Asn Asp Ile Phe His Leu Leu
 65 70 75 80
 Lys Ser His Thr Asn Val Leu Ser Val Asn Leu Pro Asp Asn Phe Thr
 85 90 95
 Leu Lys Glu Asp Gly Met Glu Thr Val Pro Trp Phe Pro Lys Lys Ile
 100 105 110
 Ser Asp Leu Asp His Cys Ala Asn Arg Val Leu Met Tyr Gly Ser Glu
 115 120 125
 Leu Asp Ala Asp His Pro Gly Phe Lys Asp Asn Val Tyr Arg Lys Arg
 130 135 140
 Arg Lys Tyr Phe Ala Asp Leu Ala Met Asn Tyr Lys His Gly Asp Pro
 145 150 155 160
 Ile Pro Lys Val Glu Phe Thr Glu Glu Glu Ile Lys Thr Trp Gly Thr
 165 170 175
 Val Phe Gln Glu Leu Asn Lys Leu Tyr Pro Thr His Ala Cys Arg Glu
 180 185 190
 Tyr Leu Lys Asn Leu Pro Leu Leu Ser Lys Tyr Cys Gly Tyr Arg Glu
 195 200 205
 Asp Asn Ile Pro Gln Leu Glu Asp Val Ser Asn Phe Leu Lys Glu Arg
 210 215 220
 Thr Gly Phe Ser Ile Arg Pro Val Ala Gly Tyr Leu Ser Pro Arg Asp
 225 230 235 240
 Phe Leu Ser Gly Leu Ala Phe Arg Val Phe His Cys Thr Gln Tyr Val
 245 250 255
 Arg His Ser Ser Asp Pro Phe Tyr Thr Pro Glu Pro Asp Thr Cys His
 260 265 270
 Glu Leu Leu Gly His Val Pro Leu Leu Ala Glu Pro Ser Phe Ala Gln
 275 280 285
 Phe Ser Gln Glu Ile Gly Leu Ala Ser Leu Gly Ala Ser Glu Glu Ala
 290 295 300
 Val Gln Lys Leu Ala Thr Cys Tyr Phe Phe Thr Val Glu Phe Gly Leu
 305 310 315 320
 Cys Lys Gln Asp Gly Gln Leu Arg Val Phe Gly Ala Gly Leu Leu Ser
 325 330 335

Ser Ile Ser Glu Leu Lys His Val Leu Ser Gly His Ala Lys Val Lys
 340 345 350
 Pro Phe Asp Pro Lys Ile Thr Cys Lys Gln Glu Cys Leu Ile Thr Thr
 355 360 365
 Phe Gln Asp Val Tyr Phe Val Ser Glu Ser Phe Glu Asp Ala Lys Glu
 370 375 380
 Lys Met Arg Glu Phe Thr Lys Thr Ile Lys Arg Pro Phe Gly Val Lys
 385 390 395 400
 Tyr Asn Pro Tyr Thr Arg Ser Ile Gln Ile Leu Lys Asp Ala Lys Ser
 405 410 415
 Ile Thr Asn Ala Met Asn Glu Leu Arg His Asp Leu Asp Val Val Ser
 420 425 430
 Asp Ala Leu Gly Lys Val Ser Arg Lys Pro Ser Ile *
 435 440 444

<210> 1871

<211> 859

<212> PRT

<213> Homo sapiens

<400> 1871

Met Val Asn Phe Thr Val Asp Gln Ile Arg Ala Ile Met Asp Lys Lys
 1 5 10 15
 Ala Asn Ile Arg Asn Met Ser Val Ile Ala His Val Asp His Gly Lys
 20 25 30
 Ser Thr Leu Thr Asp Ser Leu Val Cys Lys Ala Gly Ile Ile Ala Ser
 35 40 45
 Ala Arg Ala Gly Glu Thr Arg Phe Thr Asp Thr Arg Lys Asp Glu Gln
 50 55 60
 Glu Arg Cys Ile Thr Ile Lys Ser Thr Ala Ile Ser Leu Phe Tyr Glu
 65 70 75 80
 Leu Ser Glu Asn Asp Leu Asn Phe Ile Lys Gln Ser Lys Asp Gly Ala
 85 90 95
 Gly Phe Leu Ile Asn Leu Ile Asp Ser Pro Gly His Val Asp Phe Ser
 100 105 110
 Ser Glu Val Thr Ala Ala Leu Arg Val Thr Asp Gly Ala Leu Val Val
 115 120 125
 Val Asp Cys Val Ser Gly Val Cys Val Gln Thr Glu Thr Val Leu Arg
 130 135 140
 Gln Ala Ile Ala Glu Arg Ile Lys Pro Val Leu Met Met Asn Lys Met
 145 150 155 160
 Asp Arg Ala Leu Leu Glu Leu Gln Leu Glu Pro Glu Glu Leu Tyr Gln
 165 170 175
 Thr Phe Gln Arg Ile Val Glu Asn Val Asn Val Ile Ile Ser Thr Tyr
 180 185 190
 Gly Glu Gly Glu Ser Gly Pro Met Gly Asn Ile Met Ile Asp Pro Val
 195 200 205
 Leu Gly Thr Val Gly Phe Gly Ser Gly Leu His Gly Trp Ala Phe Thr
 210 215 220
 Leu Lys Gln Phe Ala Glu Met Tyr Val Ala Lys Phe Ala Ala Lys Gly
 225 230 235 240
 Glu Gly Gln Leu Gly Pro Ala Glu Arg Ala Lys Lys Val Glu Asp Met
 245 250 255
 Met Lys Lys Leu Trp Gly Asp Arg Tyr Phe Asp Pro Ala Asn Gly Lys
 260 265 270
 Phe Ser Lys Ser Ala Thr Ser Pro Glu Gly Lys Lys Leu Pro Arg Thr
 275 280 285
 Phe Cys Gln Leu Ile Leu Asp Pro Ile Phe Lys Val Phe Asp Ala Ile
 290 295 300
 Met Asn Phe Lys Lys Glu Glu Thr Ala Lys Leu Ile Glu Lys Leu Asp
 305 310 315 320

Ile	Lys	Leu	Asp	Ser	Glu	Asp	Lys	Asp	Lys	Glu	Gly	Lys	Pro	Leu	Leu	
				325					330					335		
Lys	Ala	Val	Met	Arg	Arg	Trp	Leu	Pro	Ala	Gly	Asp	Ala	Leu	Leu	Gln	
			340					345					350			
Met	Ile	Thr	Ile	His	Leu	Pro	Ser	Pro	Val	Thr	Ala	Gln	Lys	Tyr	Arg	
		355					360					365				
Cys	Glu	Leu	Leu	Tyr	Glu	Gly	Pro	Pro	Asp	Asp	Glu	Ala	Ala	Met	Gly	
	370					375					380					
Ile	Lys	Ser	Cys	Asp	Pro	Lys	Gly	Pro	Leu	Met	Met	Tyr	Ile	Ser	Lys	
385					390					395					400	
Met	Val	Pro	Thr	Ser	Asp	Lys	Gly	Arg	Phe	Tyr	Ala	Phe	Gly	Arg	Val	
				405					410					415		
Phe	Ser	Gly	Leu	Val	Ser	Thr	Gly	Leu	Lys	Val	Arg	Ile	Met	Gly	Pro	
			420					425						430		
Asn	Tyr	Thr	Pro	Gly	Lys	Lys	Glu	Asp	Leu	Tyr	Leu	Lys	Pro	Ile	Gln	
		435					440					445				
Arg	Thr	Ile	Leu	Met	Met	Gly	Arg	Tyr	Val	Glu	Pro	Ile	Glu	Asp	Val	
	450					455					460					
Pro	Cys	Gly	Asn	Ile	Val	Gly	Leu	Val	Gly	Val	Asp	Gln	Phe	Leu	Val	
465					470					475					480	
Lys	Thr	Gly	Thr	Ile	Thr	Thr	Phe	Glu	His	Ala	His	Asn	Met	Arg	Val	
				485				490						495		
Met	Lys	Phe	Ser	Val	Ser	Pro	Val	Val	Arg	Val	Ala	Val	Glu	Ala	Lys	
			500					505					510			
Asn	Pro	Ala	Asp	Leu	Pro	Lys	Leu	Val	Glu	Gly	Leu	Lys	Arg	Leu	Ala	
		515					520					525				
Lys	Ser	Asp	Pro	Met	Val	Gln	Cys	Ile	Ile	Glu	Glu	Ser	Gly	Glu	His	
	530					535					540					
Ile	Ile	Ala	Gly	Ala	Gly	Glu	Leu	His	Leu	Glu	Ile	Cys	Leu	Lys	Asp	
545					550					555					560	
Leu	Glu	Glu	Asp	His	Ala	Cys	Ile	Pro	Ile	Lys	Lys	Ser	Asp	Pro	Val	
				565					570					575		
Val	Ser	Tyr	Arg	Glu	Thr	Val	Ser	Glu	Glu	Ser	Asn	Val	Leu	Cys	Leu	
			580					585					590			
Ser	Lys	Ser	Pro	Asn	Lys	His	Asn	Arg	Leu	Tyr	Met	Lys	Ala	Arg	Pro	
		595					600					605				
Phe	Pro	Asp	Gly	Leu	Ala	Glu	Asp	Ile	Asp	Lys	Gly	Glu	Val	Ser	Ala	
	610					615					620					
Arg	Gln	Glu	Leu	Lys	Gln	Arg	Ala	Arg	Tyr	Leu	Ala	Glu	Lys	Tyr	Glu	
625					630					635					640	
Trp	Asp	Val	Ala	Glu	Ala	Arg	Lys	Ile	Trp	Cys	Phe	Gly	Pro	Asp	Gly	
				645					650					655		
Thr	Gly	Pro	Asn	Ile	Leu	Thr	Asp	Ile	Thr	Lys	Gly	Val	Gln	Tyr	Leu	
			660					665					670			
Asn	Glu	Ile	Lys	Asp	Ser	Val	Val	Ala	Gly	Phe	Gln	Trp	Ala	Thr	Lys	
		675					680						685			
Glu	Gly	Ala	Leu	Cys	Glu	Glu	Asn	Met	Arg	Gly	Val	Arg	Phe	Asp	Val	
	690					695					700					
His	Asp	Val	Thr	Leu	His	Ala	Asp	Ala	Ile	His	Arg	Gly	Gly	Gly	Gln	
705					710					715					720	
Ile	Ile	Pro	Thr	Ala	Arg	Arg	Cys	Leu	Tyr	Ala	Ser	Val	Leu	Thr	Ala	
				725					730					735		
Gln	Pro	Arg	Leu	Met	Glu	Pro	Ile	Tyr	Leu	Val	Glu	Ile	Gln	Cys	Pro	
			740					745					750			
Glu	Gln	Val	Val	Gly	Gly	Ile	Tyr	Gly	Val	Leu	Asn	Arg	Lys	Arg	Gly	
	755						760					765				
His	Val	Phe	Glu	Glu	Ser	Gln	Val	Ala	Gly	Thr	Pro	Met	Phe	Val	Val	
	770					775					780					
Lys	Ala	Tyr	Leu	Pro	Val	Asn	Glu	Ser	Phe	Gly	Phe	Thr	Ala	Asp	Leu	
785					790					795					800	
Arg	Ser	Asn	Thr	Gly	Gly	Gln	Ala	Phe	Pro	Gln	Cys	Val	Phe	Asp	His	
				805					810					815		
Trp	Gln	Ile	Leu	Pro	Gly	Asp	Pro	Phe	Asp	Asn	Ser	Ser	Arg	Pro	Ser	
			820					825						830		

Gln Val Val Ala Glu Thr Arg Lys Arg Lys Gly Leu Lys Glu Gly Ile
 835 840 845
 Pro Ala Leu Asp Asn Phe Leu Asp Lys Leu *
 850 855 858

<210> 1872
 <211> 215
 <212> PRT
 <213> Homo sapiens

<400> 1872
 Met Ala Ser Lys Ile Leu Leu Asn Val Gln Glu Glu Val Thr Cys Pro
 1 5 10 15
 Ile Cys Leu Glu Leu Leu Thr Glu Pro Leu Ser Leu Asp Cys Gly His
 20 25 30
 Ser Leu Cys Arg Ala Cys Ile Thr Val Ser Asn Lys Glu Ala Val Thr
 35 40 45
 Ser Met Gly Gly Lys Ser Ser Cys Pro Val Cys Gly Ile Ser Tyr Ser
 50 55 60
 Phe Glu His Leu Gln Ala Asn Gln His Leu Ala Asn Ile Val Glu Arg
 65 70 75 80
 Leu Lys Glu Val Lys Leu Ser Pro Asp Asn Gly Lys Lys Arg Asp Leu
 85 90 95
 Cys Asp His His Gly Glu Lys Leu Leu Phe Cys Lys Glu Asp Arg
 100 105 110
 Lys Val Ile Cys Trp Leu Cys Glu Arg Ser Gln Glu His Arg Gly His
 115 120 125
 His Thr Val Leu Thr Glu Glu Val Phe Lys Glu Cys Gln Glu Lys Leu
 130 135 140
 Gln Ala Val Leu Lys Arg Leu Lys Lys Glu Glu Glu Ala Glu Lys
 145 150 155 160
 Leu Glu Ala Asp Ile Arg Glu Glu Lys Thr Ser Trp Lys Tyr Gln Val
 165 170 175
 Gln Thr Glu Arg Gln Arg Ile Gln Thr Glu Phe Asp Gln Leu Arg Ser
 180 185 190
 Ile Leu Asn Asn Glu Glu Gln Arg Glu Leu Gln Arg Leu Glu Lys Lys
 195 200 205
 Lys Lys Lys Ile Phe Asn *
 210 214

<210> 1873
 <211> 611
 <212> PRT
 <213> Homo sapiens

<400> 1873
 Met Asp Ser Val Ala Phe Glu Asp Val Ala Val Asn Phe Thr Gln Glu
 1 5 10 15
 Glu Trp Ala Leu Leu Gly Pro Ser Gln Lys Ser Leu Tyr Arg Asn Val
 20 25 30
 Met Gln Glu Thr Ile Arg Asn Leu Asp Cys Ile Glu Met Lys Trp Glu
 35 40 45
 Asp Gln Asn Ile Gly Asp Gln Cys Gln Asn Ala Lys Arg Asn Leu Arg
 50 55 60
 Ser His Thr Cys Glu Ile Lys Asp Asp Ser Gln Cys Gly Glu Thr Phe
 65 70 75 80
 Gly Gln Ile Pro Asp Ser Ile Val Asn Lys Asn Thr Pro Arg Val Asn
 85 90 95

Pro	Cys	Asp	Ser	Gly	Glu	Cys	Gly	Glu	Val	Val	Leu	Gly	His	Ser	Ser		
			100					105					110				
Leu	Asn	Cys	Asn	Ile	Arg	Val	Asp	Thr	Gly	His	Lys	Ser	Cys	Glu	His		
		115					120					125					
Gln	Glu	Tyr	Gly	Glu	Lys	Pro	Tyr	Thr	His	Lys	Gln	Arg	Gly	Lys	Ala		
	130					135					140						
Ile	Ser	His	Gln	His	Ser	Phe	Gln	Thr	His	Glu	Arg	Pro	Pro	Thr	Gly		
145					150					155					160		
Lys	Lys	Pro	Phe	Asp	Cys	Lys	Glu	Cys	Ala	Lys	Thr	Phe	Ser	Ser	Leu		
			165						170					175			
Gly	Asn	Leu	Arg	Arg	His	Met	Ala	Ala	His	His	Gly	Asp	Gly	Pro	Tyr		
			180					185					190				
Lys	Cys	Lys	Leu	Cys	Gly	Lys	Ala	Phe	Val	Trp	Pro	Ser	Leu	Phe	His		
		195					200					205					
Leu	His	Glu	Arg	Thr	His	Thr	Gly	Glu	Lys	Pro	Tyr	Glu	Cys	Lys	Gln		
	210				215						220						
Cys	Ser	Lys	Ala	Phe	Pro	Phe	Tyr	Ser	Ser	Tyr	Leu	Arg	His	Glu	Arg		
225					230					235					240		
Ile	His	Thr	Gly	Glu	Lys	Ala	Tyr	Glu	Cys	Lys	Gln	Cys	Ser	Lys	Ala		
			245						250					255			
Phe	Pro	Asp	Tyr	Ser	Thr	Tyr	Leu	Arg	His	Glu	Arg	Thr	His	Thr	Gly		
		260						265					270				
Glu	Lys	Pro	Tyr	Lys	Cys	Thr	Gln	Cys	Gly	Lys	Ala	Phe	Ser	Cys	Tyr		
	275						280					285					
Tyr	Tyr	Thr	Arg	Leu	His	Glu	Arg	Thr	His	Thr	Gly	Glu	Gln	Pro	Tyr		
	290					295					300						
Ala	Cys	Lys	Gln	Cys	Gly	Lys	Thr	Phe	Tyr	His	His	Thr	Ser	Phe	Arg		
305					310					315					320		
Arg	His	Met	Ile	Arg	His	Thr	Gly	Asp	Gly	Pro	His	Lys	Cys	Lys	Ile		
			325					330						335			
Cys	Gly	Lys	Gly	Phe	Asp	Cys	Pro	Ser	Ser	Val	Arg	Asn	His	Glu	Thr		
		340						345					350				
Thr	His	Thr	Gly	Glu	Lys	Pro	Tyr	Glu	Cys	Lys	Gln	Cys	Gly	Lys	Val		
	355						360					365					
Leu	Ser	His	Ser	Ser	Ser	Phe	Arg	Ser	His	Met	Ile	Thr	His	Thr	Gly		
	370					375					380						
Asp	Gly	Pro	Gln	Lys	Cys	Lys	Ile	Cys	Gly	Lys	Ala	Phe	Gly	Cys	Pro		
385					390					395					400		
Ser	Leu	Phe	Gln	Arg	His	Glu	Arg	Thr	His	Thr	Gly	Glu	Lys	Pro	Tyr		
			405						410					415			
Gln	Cys	Lys	Gln	Cys	Gly	Lys	Ala	Phe	Ser	Leu	Ala	Gly	Ser	Leu	Arg		
		420						425					430				
Arg	His	Glu	Ala	Thr	His	Thr	Gly	Val	Lys	Pro	Tyr	Lys	Cys	Gln	Cys		
	435						440					445					
Gly	Lys	Ala	Phe	Ser	Asp	Leu	Ser	Ser	Phe	Gln	Asn	His	Glu	Thr	Thr		
	450					455					460						
His	Thr	Gly	Glu	Lys	Pro	Tyr	Glu	Cys	Lys	Glu	Cys	Gly	Lys	Ala	Phe		
465					470					475				480			
Ser	Cys	Phe	Lys	Tyr	Leu	Ser	Gln	His	Lys	Arg	Thr	His	Thr	Val	Glu		
			485						490					495			
Lys	Pro	Tyr	Glu	Cys	Lys	Thr	Cys	Arg	Lys	Ala	Phe	Ser	His	Phe	Ser		
		500						505					510				
Asn	Leu	Lys	Val	His	Glu	Arg	Ile	His	Ser	Gly	Glu	Lys	Pro	Tyr	Glu		
	515						520					525					
Cys	Lys	Glu	Cys	Gly	Lys	Ala	Phe	Ser	Trp	Leu	Thr	Cys	Leu	Leu	Arg		
	530					535					540						
His	Glu	Arg	Ile	His	Thr	Gly	Glu	Lys	Pro	Tyr	Glu	Cys	Leu	Gln	Cys		
545					550					555					560		
Gly	Lys	Ala	Phe	Thr	Arg	Ser	Arg	Phe	Leu	Arg	Gly	His	Glu	Lys	Thr		
			565					570						575			
His	Thr	Gly	Glu	Lys	Leu	Tyr	Glu	Cys	Lys	Glu	Cys	Gly	Lys	Ala	Leu		
		580					585						590				
Ser	Ser	Leu	Arg	Ser	Leu	His	Arg	His	Lys	Arg	Thr	His	Trp	Lys	Asp		
		595					600						605				

Thr Leu *
610

<210> 1874
<211> 196
<212> PRT
<213> Homo sapiens

<400> 1874
Met Pro Ala Phe Asn Arg Leu Phe Pro Leu Ala Ser Leu Val Leu Ile
1 5 10 15
Tyr Trp Val Ser Val Cys Phe Pro Val Cys Val Glu Val Pro Ser Glu
20 25 30
Thr Glu Ala Val Gln Gly Asn Pro Met Lys Leu Arg Cys Ile Ser Cys
35 40 45
Met Lys Arg Glu Glu Val Glu Ala Thr Thr Val Val Glu Trp Phe Tyr
50 55 60
Arg Pro Glu Gly Gly Lys Asp Phe Leu Ile Tyr Glu Tyr Arg Asn Gly
65 70 75 80
His Gln Glu Val Glu Ser Pro Phe Gln Gly Arg Leu Gln Trp Asn Gly
85 90 95
Ser Lys Asp Leu Gln Asp Val Ser Ile Thr Val Leu Asn Val Thr Leu
100 105 110
Asn Asp Ser Gly Leu Tyr Thr Cys Asn Val Ser Arg Glu Phe Glu Phe
115 120 125
Glu Ala His Arg Pro Phe Val Lys Thr Thr Arg Leu Ile Pro Leu Arg
130 135 140
Val Thr Glu Glu Ala Gly Glu Asp Phe Thr Ser Val Val Ser Glu Ile
145 150 155 160
Met Met Tyr Ile Leu Leu Val Phe Leu Thr Leu Trp Leu Leu Ile Glu
165 170 175
Met Ile Tyr Cys Tyr Arg Lys Val Ser Lys Ala Glu Glu Ala Ala Gln
180 185 190
Glu Asn Ala *
195

<210> 1875
<211> 196
<212> PRT
<213> Homo sapiens

<400> 1875
Met Tyr Ile Thr Ile Tyr Ser Met Met Lys Ile Pro His Gln Thr Gln
1 5 10 15
Lys Lys Arg Ser Leu Glu Asp Pro Asn Ser Arg Pro Arg Arg Pro Phe
20 25 30
Phe Lys Ser Val Lys Glu Glu Val Phe Trp Arg Asn Tyr Phe Tyr Arg
35 40 45
Val Ser Leu Ile Lys Gln Ser Ala Gln Leu Thr Ala Leu Ala Ala Gln
50 55 60
Gln Gln Ala Ala Gly Lys Glu Glu Lys Ser Asn Gly Arg Glu Gln Asp
65 70 75 80
Leu Pro Leu Ala Glu Ala Val Arg Pro Lys Thr Pro Pro Val Val Ile
85 90 95
Lys Ser Gln Leu Lys Thr Gln Glu Asp Glu Glu Glu Ile Ser Thr Ser
100 105 110
Pro Gly Val Ser Glu Phe Val Ser Asp Ala Phe Asp Ala Cys Asn Leu
115 120 125

Asn Gln Glu Asp Leu Arg Lys Glu Met Glu Gln Leu Val Leu Asp Lys
 130 135 140
 Lys Gln Glu Glu Thr Ala Val Leu Glu Glu Asp Ser Ala Asp Trp Glu
 145 150 155 160
 Lys Glu Leu Gln Gln Glu Leu Gln Glu Tyr Glu Val Val Thr Glu Ser
 165 170 175
 Glu Lys Arg Asp Glu Asn Trp Asp Lys Glu Ile Glu Lys Met Leu Gln
 180 185 190
 Glu Glu Asn *
 195

<210> 1876
 <211> 582
 <212> PRT
 <213> Homo sapiens

<400> 1876
 Met Pro Ala Pro Arg Ala Arg Glu Gln Pro Arg Val Pro Gly Glu Arg
 1 5 10 15
 Gln Pro Leu Leu Pro Arg Gly Ala Arg Gly Pro Arg Arg Trp Arg Arg
 20 25 30
 Ala Ala Gly Ala Ala Val Leu Leu Val Glu Met Leu Glu Arg Ala Ala
 35 40 45
 Phe Phe Gly Val Thr Ala Asn Leu Val Leu Tyr Leu Asn Ser Thr Asn
 50 55 60
 Phe Asn Trp Thr Gly Glu Gln Ala Thr Arg Ala Ala Leu Val Phe Leu
 65 70 75 80
 Gly Ala Ser Tyr Leu Leu Ala Pro Val Gly Gly Trp Leu Ala Asp Val
 85 90 95
 Tyr Leu Gly Arg Tyr Arg Ala Val Ala Leu Ser Leu Leu Tyr Leu
 100 105 110
 Ala Ala Ser Gly Leu Leu Pro Ala Thr Ala Phe Pro Asp Gly Arg Ser
 115 120 125
 Ser Phe Cys Gly Glu Met Pro Ala Ser Pro Leu Gly Pro Ala Cys Pro
 130 135 140
 Ser Ala Gly Cys Pro Arg Ser Ser Pro Ser Pro Tyr Cys Ala Pro Val
 145 150 155 160
 Leu Tyr Ala Gly Leu Leu Leu Leu Gly Leu Ala Ala Ser Ser Val Arg
 165 170 175
 Ser Asn Leu Thr Ser Phe Gly Ala Asp Gln Val Met Asp Leu Gly Arg
 180 185 190
 Asp Ala Thr Arg Arg Phe Phe Asn Trp Phe Tyr Trp Ser Ile Asn Leu
 195 200 205
 Gly Ala Val Leu Ser Leu Leu Val Val Ala Phe Ile Gln Gln Asn Ile
 210 215 220
 Ser Phe Leu Leu Gly Tyr Ser Ile Pro Val Gly Cys Val Gly Leu Ala
 225 230 235 240
 Phe Phe Ile Phe Leu Phe Ala Thr Pro Val Phe Ile Thr Lys Pro Pro
 245 250 255
 Met Gly Ser Gln Val Ser Ser Met Leu Lys Leu Ala Leu Gln Asn Cys
 260 265 270
 Cys Pro Gln Leu Trp Gln Arg His Ser Ala Arg Asp Arg Gln Cys Ala
 275 280 285
 Arg Val Leu Ala Asp Glu Arg Ser Pro Gln Pro Gly Ala Ser Pro Gln
 290 295 300
 Glu Asp Ile Ala Asn Phe Gln Val Leu Val Lys Ile Leu Pro Val Met
 305 310 315 320
 Val Thr Leu Val Pro Tyr Trp Met Val Tyr Phe Gln Met Gln Ser Thr
 325 330 335
 Tyr Val Leu Gln Gly Leu His Leu His Ile Pro Asn Ile Phe Pro Ala
 340 345 350


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Asn Pro Ala Asn Ile Ser Val Ala Leu Arg Ala Gln Gly Ser Ser Tyr
  355                               360                               365
Thr Ile Pro Glu Ala Trp Leu Leu Ala Asn Val Val Val Val Leu
  370                               375                               380
Ile Leu Val Pro Leu Lys Asp Arg Leu Ile Asp Pro Leu Leu Leu Arg
385                               390                               395                               400
Cys Lys Leu Leu Pro Ser Ala Leu Gln Lys Met Ala Leu Gly Met Phe
                               405                               410                               415
Phe Gly Phe Thr Ser Val Ile Val Ala Gly Val Leu Glu Met Glu Arg
                               420                               425                               430
Leu His Tyr Ile His His Asn Glu Thr Val Ser Gln Gln Ile Gly Glu
                               435                               440                               445
Val Leu Tyr Asn Ala Ala Pro Leu Ser Ile Trp Trp Gln Ile Pro Gln
                               450                               455                               460
Tyr Leu Leu Ile Gly Ile Ser Glu Ile Phe Ala Ser Ile Pro Gly Leu
465                               470                               475                               480
Glu Phe Ala Tyr Ser Glu Ala Pro Arg Ser Met Gln Gly Ala Ile Met
                               485                               490                               495
Gly Ile Phe Phe Cys Leu Ser Gly Val Gly Ser Leu Leu Gly Ser Ser
                               500                               505                               510
Leu Val Ala Leu Leu Ser Leu Pro Gly Gly Trp Leu His Cys Pro Lys
                               515                               520                               525
Asp Phe Gly Asn Ile Asn Asn Cys Arg Met Asp Leu Tyr Phe Phe Leu
                               530                               535                               540
Leu Ala Gly Ile Gln Ala Val Thr Ala Leu Leu Phe Val Trp Ile Ala
545                               550                               555                               560
Gly Arg Tyr Glu Arg Ala Ser Gln Gly Pro Ala Ser His Ser Arg Phe
                               565                               570                               575
Ser Arg Asp Arg Gly *
                               580 581

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<210> 1877

<211> 871

<212> PRT

<213> Homo sapiens

<400> 1877

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Met Gly Pro Pro Ser Leu Val Leu Cys Leu Leu Ser Ala Thr Val Phe
  1                               5                               10                               15
Ser Leu Leu Gly Gly Ser Ser Ala Phe Leu Ser His His Arg Leu Lys
                               20                               25                               30
Gly Arg Phe Gln Arg Asp Arg Arg Asn Ile Arg Pro Asn Ile Ile Leu
                               35                               40                               45
Val Leu Thr Asp Asp Gln Asp Val Glu Leu Gly Ser Met Gln Val Met
                               50                               55                               60
Asn Lys Thr Arg Arg Ile Met Glu Gln Gly Gly Ala His Phe Ile Asn
65                               70                               75                               80
Ala Phe Val Thr Thr Pro Met Cys Cys Pro Ser Arg Ser Ser Ile Leu
                               85                               90                               95
Thr Gly Lys Tyr Val His Asn His Asn Thr Tyr Thr Asn Asn Glu Asn
                               100                               105                               110
Cys Ser Ser Pro Ser Trp Gln Ala Gln His Glu Ser Arg Thr Phe Ala
                               115                               120                               125
Val Tyr Leu Asn Ser Thr Gly Tyr Arg Thr Ala Phe Phe Gly Lys Tyr
130                               135                               140
Leu Asn Glu Tyr Asn Gly Ser Tyr Val Pro Pro Gly Trp Lys Glu Trp
145                               150                               155                               160
Val Gly Leu Leu Lys Asn Ser Arg Phe Tyr Asn Tyr Thr Leu Cys Arg
                               165                               170                               175
Asn Gly Val Lys Glu Lys His Gly Ser Asp Tyr Ser Lys Asp Tyr Leu
180                               185                               190

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Thr	Asp	Leu	Ile	Thr	Asn	Asp	Ser	Val	Ser	Phe	Phe	Arg	Thr	Ser	Lys
		195					200					205			
Lys	Met	Tyr	Pro	His	Arg	Pro	Val	Leu	Met	Val	Ile	Ser	His	Ala	Ala
		210				215					220				
Pro	His	Gly	Pro	Glu	Asp	Ser	Ala	Pro	Gln	Tyr	Ser	Arg	Leu	Phe	Pro
225					230					235					240
Asn	Ala	Ser	Gln	His	Ile	Thr	Pro	Ser	Tyr	Asn	Tyr	Ala	Pro	Asn	Pro
				245					250					255	
Asp	Lys	His	Trp	Ile	Met	Arg	Tyr	Thr	Gly	Pro	Met	Lys	Pro	Ile	His
			260					265					270		
Met	Glu	Phe	Thr	Asn	Met	Leu	Gln	Arg	Lys	Arg	Leu	Gln	Thr	Leu	Met
		275					280					285			
Ser	Val	Asp	Asp	Ser	Met	Glu	Thr	Ile	Tyr	Asn	Met	Leu	Val	Glu	Thr
		290				295					300				
Gly	Glu	Leu	Asp	Asn	Thr	Tyr	Ile	Val	Tyr	Thr	Ala	Asp	His	Gly	Tyr
305					310					315					320
His	Ile	Gly	Gln	Phe	Gly	Leu	Val	Lys	Gly	Lys	Ser	Met	Pro	Tyr	Glu
				325					330					335	
Phe	Asp	Ile	Arg	Val	Pro	Phe	Tyr	Val	Arg	Gly	Pro	Asn	Val	Glu	Ala
			340					345					350		
Gly	Cys	Leu	Asn	Pro	His	Ile	Val	Leu	Asn	Ile	Asp	Leu	Ala	Pro	Thr
		355					360					365			
Ile	Leu	Asp	Ile	Ala	Gly	Leu	Asp	Ile	Pro	Ala	Asp	Met	Asp	Gly	Lys
		370				375					380				
Ser	Ile	Leu	Lys	Leu	Leu	Asp	Thr	Glu	Arg	Pro	Val	Asn	Arg	Phe	His
385					390					395					400
Leu	Lys	Lys	Lys	Met	Arg	Val	Trp	Arg	Asp	Ser	Phe	Leu	Val	Glu	Arg
				405					410					415	
Gly	Lys	Leu	Leu	His	Lys	Arg	Asp	Asn	Asp	Lys	Val	Asp	Ala	Gln	Glu
			420				425					430			
Glu	Asn	Phe	Leu	Pro	Lys	Tyr	Gln	Arg	Val	Lys	Asp	Leu	Cys	Gln	Arg
		435					440					445			
Ala	Glu	Tyr	Gln	Thr	Ala	Cys	Glu	Gln	Leu	Gly	Gln	Lys	Trp	Gln	Cys
		450				455					460				
Val	Glu	Asp	Ala	Thr	Gly	Lys	Leu	Lys	Leu	His	Lys	Cys	Lys	Gly	Pro
465					470					475					480
Met	Arg	Leu	Gly	Gly	Ser	Arg	Ala	Leu	Ser	Asn	Leu	Val	Pro	Lys	Tyr
				485					490					495	
Tyr	Gly	Gln	Gly	Ser	Glu	Ala	Cys	Thr	Cys	Asp	Ser	Gly	Asp	Tyr	Lys
		500						505					510		
Leu	Ser	Leu	Ala	Gly	Arg	Arg	Lys	Lys	Leu	Phe	Lys	Lys	Lys	Tyr	Lys
		515					520					525			
Ala	Ser	Tyr	Val	Arg	Ser	Arg	Ser	Ile	Arg	Ser	Val	Ala	Ile	Glu	Val
		530				535					540				
Asp	Gly	Arg	Val	Tyr	His	Val	Gly	Leu	Gly	Asp	Ala	Ala	Gln	Pro	Arg
545					550					555					560
Asn	Leu	Thr	Lys	Arg	His	Trp	Pro	Gly	Ala	Pro	Glu	Asp	Gln	Asp	Asp
				565					570					575	
Lys	Asp	Gly	Gly	Asp	Phe	Ser	Gly	Thr	Gly	Gly	Leu	Pro	Asp	Tyr	Ser
			580					585					590		
Ala	Ala	Asn	Pro	Ile	Lys	Val	Thr	His	Arg	Cys	Tyr	Ile	Leu	Glu	Asn
		595					600					605			
Asp	Thr	Val	Gln	Cys	Asp	Leu	Asp	Leu	Tyr	Lys	Ser	Leu	Gln	Ala	Trp
		610				615					620				
Lys	Asp	His	Lys	Leu	His	Ile	Asp	His	Glu	Ile	Glu	Thr	Leu	Gln	Asn
625					630					635					640
Lys	Ile	Lys	Asn	Leu	Arg	Glu	Val	Arg	Gly	His	Leu	Lys	Lys	Lys	Arg
				645					650					655	
Pro	Glu	Glu	Cys	Asp	Cys	His	Lys	Ile	Ser	Tyr	His	Thr	Gln	His	Lys
			660					665					670		
Gly	Arg	Leu	Lys	His	Arg	Gly	Ser	Ser	Leu	His	Pro	Phe	Arg	Lys	Gly
		675					680					685			
Leu	Gln	Glu	Lys	Asp	Lys	Val	Trp	Leu	Leu	Arg	Glu	Gln	Lys	Arg	Lys
		690				695						700			

Lys Lys Leu Arg Lys Leu Leu Lys Arg Leu Gln Asn Asn Asp Thr Cys
 705 710 715 720
 Ser Met Pro Gly Leu Thr Cys Phe Thr His Asp Asn Gln His Trp Gln
 725 730 735
 Thr Ala Pro Phe Trp Thr Leu Gly Pro Phe Cys Ala Cys Thr Ser Ala
 740 745 750
 Asn Asn Asn Thr Tyr Trp Cys Met Arg Thr Ile Asn Glu Thr His Asn
 755 760 765
 Phe Leu Phe Cys Glu Phe Ala Thr Gly Phe Leu Glu Tyr Phe Asp Leu
 770 775 780
 Asn Thr Asp Pro Tyr Gln Leu Met Asn Ala Val Asn Thr Leu Asp Arg
 785 790 795 800
 Asp Val Leu Asn Gln Leu His Val Gln Leu Met Glu Leu Arg Ser Cys
 805 810 815
 Lys Gly Tyr Lys Gln Cys Asn Pro Arg Thr Arg Asn Met Asp Leu Gly
 820 825 830
 Leu Lys Asp Gly Gly Ser Tyr Glu Gln Tyr Arg Gln Phe Gln Arg Arg
 835 840 845
 Lys Trp Pro Glu Met Lys Arg Pro Ser Ser Lys Ser Leu Gly Gln Leu
 850 855 860
 Trp Glu Gly Trp Glu Gly *
 865 870

<210> 1878

<211> 851

<212> PRT

<213> Homo sapiens

<400> 1878

Met Gly Pro Pro Ser Leu Val Leu Cys Leu Leu Ser Ala Thr Val Phe
 1 5 10 15
 Ser Leu Leu Gly Gly Ser Ser Ala Phe Leu Ser His His Arg Leu Lys
 20 25 30
 Gly Arg Phe Gln Arg Asp Arg Arg Asn Ile Arg Pro Asn Ile Ile Leu
 35 40 45
 Val Leu Thr Asp Asp Gln Asp Val Glu Leu Gly Ser Met Gln Val Met
 50 55 60
 Asn Lys Thr Arg Arg Ile Met Glu Gln Gly Gly Ala His Phe Ile Asn
 65 70 75 80
 Ala Phe Val Thr Thr Pro Met Cys Cys Pro Ser Arg Ser Ser Ile Leu
 85 90 95
 Thr Gly Lys Tyr Val His Asn His Asn Thr Tyr Thr Asn Asn Glu Asn
 100 105 110
 Cys Ser Ser Pro Ser Trp Gln Ala Gln His Glu Ser Arg Thr Phe Ala
 115 120 125
 Val Tyr Leu Asn Ser Thr Gly Tyr Arg Thr Ala Phe Phe Gly Lys Tyr
 130 135 140
 Leu Asn Glu Tyr Asn Gly Ser Tyr Val Pro Pro Gly Trp Lys Glu Trp
 145 150 155 160
 Val Gly Leu Leu Lys Asn Ser Arg Phe Tyr Asn Tyr Thr Leu Cys Arg
 165 170 175
 Asn Gly Val Lys Glu Lys His Gly Ser Asp Tyr Ser Lys Asp Tyr Leu
 180 185 190
 Thr Asp Leu Ile Thr Asn Asp Ser Val Ser Phe Phe Arg Thr Ser Lys
 195 200 205
 Lys Met Tyr Pro His Arg Pro Val Leu Met Val Ile Ser His Ala Ala
 210 215 220
 Pro His Gly Pro Glu Asp Ser Ala Pro Gln Tyr Ser Arg Leu Phe Pro
 225 230 235 240
 Asn Ala Ser Gln His Ile Thr Pro Ser Tyr Asn Tyr Ala Pro Asn Pro
 245 250 255

Asp	Lys	His	Trp	Ile	Met	Arg	Tyr	Thr	Gly	Pro	Met	Lys	Pro	Ile	His
			260					265					270		
Met	Glu	Phe	Thr	Asn	Met	Leu	Gln	Arg	Lys	Arg	Leu	Gln	Thr	Leu	Met
		275					280					285			
Ser	Val	Asp	Asp	Ser	Met	Glu	Thr	Ile	Tyr	Asn	Met	Leu	Val	Glu	Thr
	290					295					300				
Gly	Glu	Leu	Asp	Asn	Thr	Tyr	Ile	Val	Tyr	Thr	Ala	Asp	His	Gly	Tyr
305					310					315					320
His	Ile	Gly	Gln	Phe	Gly	Leu	Val	Lys	Gly	Lys	Ser	Met	Pro	Tyr	Glu
			325						330					335	
Phe	Asp	Ile	Arg	Val	Pro	Phe	Tyr	Val	Arg	Gly	Pro	Asn	Val	Glu	Ala
			340					345					350		
Gly	Cys	Leu	Asn	Pro	His	Ile	Val	Leu	Asn	Ile	Asp	Leu	Ala	Pro	Thr
	355						360					365			
Ile	Leu	Asp	Ile	Ala	Gly	Leu	Asp	Ile	Pro	Ala	Asp	Met	Asp	Gly	Lys
	370					375					380				
Ser	Ile	Leu	Lys	Leu	Leu	Asp	Thr	Glu	Arg	Pro	Val	Asn	Arg	Phe	His
385					390					395					400
Leu	Lys	Lys	Lys	Met	Arg	Val	Trp	Arg	Asp	Ser	Phe	Leu	Val	Glu	Arg
			405						410					415	
Gly	Lys	Leu	Leu	His	Lys	Arg	Asp	Asn	Asp	Lys	Val	Asp	Ala	Gln	Glu
			420					425					430		
Glu	Asn	Phe	Leu	Pro	Lys	Tyr	Gln	Arg	Val	Lys	Asp	Leu	Cys	Gln	Arg
	435						440					445			
Ala	Glu	Tyr	Gln	Thr	Ala	Cys	Glu	Gln	Leu	Gly	Gln	Lys	Trp	Gln	Cys
	450					455					460				
Val	Glu	Asp	Ala	Thr	Gly	Lys	Leu	Lys	Leu	His	Lys	Cys	Lys	Gly	Pro
465					470					475					480
Met	Arg	Leu	Gly	Gly	Ser	Arg	Ala	Leu	Ser	Asn	Leu	Val	Pro	Lys	Tyr
			485						490					495	
Tyr	Gly	Gln	Gly	Ser	Glu	Ala	Cys	Thr	Cys	Asp	Ser	Gly	Asp	Tyr	Lys
		500						505					510		
Leu	Ser	Leu	Ala	Gly	Arg	Arg	Lys	Lys	Leu	Phe	Lys	Lys	Lys	Tyr	Lys
	515						520					525			
Ala	Ser	Tyr	Val	Arg	Ser	Arg	Ser	Ile	Arg	Ser	Val	Ala	Ile	Glu	Val
	530					535					540				
Asp	Gly	Arg	Val	Tyr	His	Val	Gly	Leu	Gly	Asp	Ala	Ala	Gln	Pro	Arg
545					550					555					560
Asn	Leu	Thr	Lys	Arg	His	Trp	Pro	Gly	Ala	Pro	Glu	Asp	Gln	Asp	Asp
			565						570					575	
Lys	Asp	Gly	Gly	Asp	Phe	Ser	Gly	Thr	Gly	Gly	Leu	Pro	Asp	Tyr	Ser
		580						585					590		
Ala	Ala	Asn	Pro	Ile	Lys	Val	Thr	His	Arg	Cys	Tyr	Ile	Leu	Glu	Asn
	595						600					605			
Asp	Thr	Val	Gln	Cys	Asp	Leu	Asp	Leu	Tyr	Lys	Ser	Leu	Gln	Ala	Trp
	610					615					620				
Lys	Asp	His	Lys	Leu	His	Ile	Asp	His	Glu	Ile	Glu	Thr	Leu	Gln	Asn
625					630					635					640
Lys	Ile	Lys	Asn	Leu	Arg	Glu	Val	Arg	Gly	His	Leu	Lys	Lys	Lys	Arg
			645						650					655	
Pro	Glu	Glu	Cys	Asp	Cys	His	Lys	Ile	Arg	Lys	Gly	Leu	Gln	Glu	Lys
		660						665					670		
Asp	Lys	Val	Trp	Leu	Leu	Arg	Glu	Gln	Lys	Arg	Lys	Lys	Lys	Leu	Arg
	675						680					685			
Lys	Leu	Leu	Lys	Arg	Leu	Gln	Asn	Asn	Asp	Thr	Cys	Ser	Met	Pro	Gly
	690					695					700				
Leu	Thr	Cys	Phe	Thr	His	Asp	Asn	Gln	His	Trp	Gln	Thr	Ala	Pro	Phe
705					710					715					720
Trp	Thr	Leu	Gly	Pro	Phe	Cys	Ala	Cys	Thr	Ser	Ala	Asn	Asn	Asn	Thr
			725						730					735	
Tyr	Trp	Cys	Met	Arg	Thr	Ile	Asn	Glu	Thr	His	Asn	Phe	Leu	Phe	Cys
		740						745					750		
Glu	Phe	Ala	Thr	Gly	Phe	Leu	Glu	Tyr	Phe	Asp	Leu	Asn	Thr	Asp	Pro
	755						760						765		

Tyr Gln Leu Met Asn Ala Val Asn Thr Leu Asp Arg Asp Val Leu Asn
 770 775 780
 Gln Leu His Val Gln Leu Met Glu Leu Arg Ser Cys Lys Gly Tyr Lys
 785 790 795 800
 Gln Cys Asn Pro Arg Thr Arg Asn Met Asp Leu Gly Leu Lys Asp Gly
 805 810 815
 Gly Ser Tyr Glu Gln Tyr Arg Gln Phe Gln Arg Arg Lys Trp Pro Glu
 820 825 830
 Met Lys Arg Pro Ser Ser Lys Ser Leu Gly Gln Leu Trp Glu Gly Trp
 835 840 845
 Glu Gly *
 850

<210> 1879
 <211> 420
 <212> PRT
 <213> Homo sapiens

<400> 1879
 Met Val Phe Ser Ala Val Leu Thr Ala Phe His Thr Gly Thr Ser Asn
 1 5 10 15
 Thr Thr Phe Val Val Tyr Glu Asn Thr Tyr Met Asn Ile Thr Leu Pro
 20 25 30
 Pro Pro Phe Gln His Pro Asp Leu Ser Pro Leu Leu Arg Tyr Ser Phe
 35 40 45
 Glu Thr Met Ala Pro Thr Gly Leu Ser Ser Leu Thr Val Asn Ser Thr
 50 55 60
 Ala Val Pro Thr Thr Pro Ala Ala Phe Lys Ser Leu Asn Leu Pro Leu
 65 70 75 80
 Gln Ile Thr Leu Ser Ala Ile Met Ile Phe Ile Leu Phe Val Ser Phe
 85 90 95
 Leu Gly Asn Leu Val Val Cys Leu Met Val Tyr Gln Lys Ala Ala Met
 100 105 110
 Arg Ser Ala Ile Asn Ile Leu Leu Ala Ser Leu Ala Phe Ala Asp Met
 115 120 125
 Leu Leu Ala Val Leu Asn Met Pro Phe Ala Leu Val Thr Ile Leu Thr
 130 135 140
 Thr Arg Trp Ile Phe Gly Lys Phe Phe Cys Arg Val Ser Ala Met Phe
 145 150 155 160
 Phe Trp Leu Phe Val Ile Glu Gly Val Ala Ile Leu Leu Ile Ile Ser
 165 170 175
 Ile Asp Arg Phe Leu Ile Ile Val Gln Arg Gln Asp Lys Leu Asn Pro
 180 185 190
 Tyr Arg Ala Lys Val Leu Ile Ala Val Ser Trp Ala Thr Ser Phe Cys
 195 200 205
 Val Ala Phe Pro Leu Ala Val Gly Asn Pro Asp Leu Gln Ile Pro Ser
 210 215 220
 Arg Ala Pro Gln Cys Val Phe Gly Tyr Thr Thr Asn Pro Gly Tyr Gln
 225 230 235 240
 Ala Tyr Val Ile Leu Ile Ser Leu Ile Ser Phe Phe Ile Pro Phe Leu
 245 250 255
 Val Ile Leu Tyr Ser Phe Met Gly Ile Leu Asn Thr Leu Arg His Asn
 260 265 270
 Ala Leu Arg Ile His Ser Tyr Pro Glu Gly Ile Cys Leu Ser Gln Ala
 275 280 285
 Ser Lys Leu Gly Leu Met Ser Leu Gln Arg Pro Phe Gln Met Ser Ile
 290 295 300
 Asp Met Gly Phe Lys Thr Arg Ala Phe Thr Thr Ile Leu Ile Leu Phe
 305 310 315 320
 Ala Val Phe Ile Val Cys Trp Ala Pro Phe Thr Thr Tyr Ser Leu Val
 325 330 335

Ala	Thr	Phe	Ser	Lys	His	Phe	Tyr	Tyr	Gln	His	Asn	Phe	Phe	Glu	Ile
			340					345					350		
Ser	Thr	Trp	Leu	Leu	Trp	Leu	Cys	Tyr	Leu	Lys	Ser	Ala	Leu	Asn	Pro
		355					360					365			
Leu	Ile	Tyr	Tyr	Trp	Arg	Ile	Lys	Lys	Phe	His	Asp	Ala	Cys	Leu	Asp
	370					375					380				
Met	Met	Pro	Lys	Ser	Phe	Lys	Phe	Leu	Pro	Gln	Leu	Pro	Gly	His	Thr
385					390					395					400
Lys	Arg	Arg	Ile	Arg	Pro	Ser	Ala	Val	Tyr	Val	Cys	Gly	Glu	His	Arg
				405					410					415	
Thr	Val	Val	*												
		419													

<210> 1880
 <211> 944
 <212> PRT
 <213> Homo sapiens

<400> 1880

Met	Ala	Ala	Val	Ala	Ala	Val	Ala	Ala	Arg	Arg	Arg	Arg	Ser	Trp	Ala
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Ser	Leu	Val	Leu	Ala	Phe	Leu	Gly	Val	Cys	Leu	Gly	Ile	Thr	Leu	Ala
		20					25					30			
Val	Asp	Arg	Ser	Asn	Phe	Lys	Thr	Cys	Glu	Glu	Ser	Ser	Phe	Cys	Lys
	35					40					45				
Arg	Gln	Arg	Ser	Ile	Arg	Pro	Gly	Leu	Ser	Pro	Tyr	Arg	Ala	Leu	Leu
	50				55					60					
Asp	Ser	Leu	Gln	Leu	Gly	Pro	Asp	Ser	Leu	Thr	Val	His	Leu	Ile	His
65			70						75					80	
Glu	Val	Thr	Lys	Val	Leu	Leu	Val	Leu	Glu	Leu	Gln	Gly	Leu	Gln	Lys
			85					90					95		
Asn	Met	Thr	Arg	Phe	Arg	Ile	Asp	Glu	Leu	Glu	Pro	Arg	Arg	Pro	Arg
		100					105					110			
Tyr	Arg	Val	Pro	Asp	Val	Leu	Val	Ala	Asp	Pro	Pro	Ile	Ala	Arg	Leu
	115					120						125			
Ser	Val	Ser	Gly	Arg	Asp	Glu	Asn	Ser	Val	Glu	Leu	Thr	Met	Ala	Glu
	130				135					140					
Gly	Pro	Tyr	Lys	Ile	Ile	Leu	Thr	Ala	Arg	Pro	Phe	Arg	Leu	Asp	Leu
145				150					155					160	
Leu	Glu	Asp	Arg	Ser	Leu	Leu	Leu	Ser	Val	Asn	Ala	Arg	Gly	Leu	Leu
			165					170						175	
Glu	Phe	Glu	His	Gln	Arg	Ala	Pro	Arg	Val	Ser	Gln	Gly	Ser	Lys	Asp
		180						185				190			
Pro	Ala	Glu	Gly	Asp	Gly	Ala	Gln	Pro	Glu	Glu	Thr	Pro	Arg	Asp	Gly
	195					200						205			
Asp	Lys	Pro	Glu	Glu	Thr	Gln	Gly	Lys	Ala	Glu	Lys	Asp	Glu	Pro	Gly
	210				215						220				
Ala	Trp	Glu	Glu	Thr	Phe	Lys	Thr	His	Ser	Asp	Ser	Lys	Pro	Tyr	Gly
225				230						235				240	
Pro	Met	Ser	Val	Gly	Leu	Asp	Phe	Ser	Leu	Pro	Gly	Met	Glu	His	Val
			245					250					255		
Tyr	Gly	Ile	Pro	Glu	His	Ala	Asp	Asn	Leu	Arg	Leu	Lys	Val	Thr	Glu
		260					265						270		
Gly	Gly	Glu	Pro	Tyr	Arg	Leu	Tyr	Asn	Leu	Asp	Val	Phe	Gln	Tyr	Glu
	275					280						285			
Leu	Tyr	Asn	Pro	Met	Ala	Leu	Tyr	Gly	Ser	Val	Pro	Val	Leu	Leu	Ala
	290					295					300				
His	Asn	Pro	His	Arg	Asp	Leu	Gly	Ile	Phe	Trp	Leu	Asn	Ala	Ala	Glu
305				310						315				320	
Thr	Trp	Val	Asp	Ile	Ser	Ser	Asn	Thr	Ala	Gly	Lys	Thr	Leu	Phe	Gly
			325						330					335	

Lys Met Met Asp Tyr Leu Gln Gly Ser Gly Glu Thr Pro Gln Thr Asp
 340 345 350
 Val Arg Trp Met Ser Glu Thr Gly Ile Ile Asp Val Phe Leu Leu Leu
 355 360 365
 Gly Pro Ser Ile Ser Asp Val Phe Arg Gln Tyr Ala Ser Leu Thr Gly
 370 375 380
 Thr Gln Ala Leu Pro Pro Leu Phe Ser Leu Gly Tyr His Gln Ser Arg
 385 390 395 400
 Trp Asn Tyr Arg Asp Glu Ala Asp Val Leu Glu Val Asp Gln Gly Phe
 405 410 415
 Asp Asp His Asn Leu Pro Cys Asp Val Ile Trp Leu Asp Ile Glu His
 420 425 430
 Ala Asp Gly Lys Arg Tyr Phe Thr Trp Asp Pro Ser Arg Phe Pro Gln
 435 440 445
 Pro Arg Thr Met Leu Glu Arg Leu Ala Ser Lys Arg Arg Lys Leu Val
 450 455 460
 Ala Ile Val Asp Pro His Ile Lys Val Asp Ser Gly Tyr Arg Val His
 465 470 475 480
 Glu Glu Leu Arg Asn Leu Gly Leu Tyr Val Lys Thr Arg Asp Gly Ser
 485 490 495
 Asp Tyr Glu Gly Trp Cys Trp Pro Gly Ser Ala Gly Tyr Pro Asp Phe
 500 505 510
 Thr Asn Pro Thr Met Arg Ala Trp Trp Ala Asn Met Phe Ser Tyr Asp
 515 520 525
 Asn Tyr Glu Gly Ser Ala Pro Asn Leu Phe Val Trp Asn Asp Met Asn
 530 535 540
 Glu Pro Ser Val Phe Asn Gly Pro Glu Val Thr Met Leu Lys Asp Ala
 545 550 555 560
 Gln His Tyr Gly Gly Trp Glu His Arg Asp Val His Asn Ile Tyr Gly
 565 570 575
 Leu Tyr Val His Met Ala Thr Ala Asp Gly Leu Arg Gln Arg Ser Gly
 580 585 590
 Gly Met Glu Arg Pro Phe Val Leu Ala Arg Ala Phe Phe Ala Gly Ser
 595 600 605
 Gln Arg Phe Gly Ala Val Trp Thr Gly Asp Asn Thr Ala Glu Trp Asp
 610 615 620
 His Leu Lys Ile Ser Ile Pro Met Cys Leu Ser Leu Gly Leu Val Gly
 625 630 635 640
 Leu Ser Phe Cys Gly Ala Asp Val Gly Gly Phe Phe Lys Asn Pro Glu
 645 650 655
 Pro Glu Leu Leu Val Arg Trp Tyr Gln Met Gly Ala Tyr Gln Pro Phe
 660 665 670
 Phe Arg Ala His Ala His Leu Asp Thr Gly Arg Arg Glu Pro Trp Leu
 675 680 685
 Leu Pro Ser Gln His Asn Asp Ile Ile Arg Asp Ala Leu Gly Gln Arg
 690 695 700
 Tyr Ser Leu Leu Pro Phe Trp Tyr Thr Leu Leu Tyr Gln Ala His Arg
 705 710 715 720
 Glu Gly Ile Pro Val Met Arg Pro Leu Trp Val Gln Tyr Pro Gln Asp
 725 730 735
 Val Thr Thr Phe Asn Ile Asp Asp Gln Tyr Leu Leu Gly Asp Ala Leu
 740 745 750
 Leu Val His Pro Val Ser Asp Ser Gly Ala His Gly Val Gln Val Tyr
 755 760 765
 Leu Pro Gly Gln Gly Glu Val Trp Tyr Asp Ile Gln Ser Tyr Gln Lys
 770 775 780
 His His Gly Pro Gln Thr Leu Tyr Leu Pro Val Thr Leu Ser Ser Ile
 785 790 795 800
 Pro Val Phe Gln Arg Gly Gly Thr Ile Val Pro Arg Trp Met Arg Val
 805 810 815
 Arg Arg Ser Ser Glu Cys Met Lys Asp Asp Pro Ile Thr Leu Phe Val
 820 825 830
 Ala Leu Ser Pro Gln Gly Thr Ala Gln Gly Glu Leu Phe Leu Asp Asp
 835 840 845

Gly	His	Thr	Phe	Asn	Tyr	Gln	Thr	Arg	Gln	Glu	Phe	Leu	Leu	Arg	Arg
850						855					860				
Phe	Ser	Phe	Ser	Gly	Asn	Thr	Leu	Val	Ser	Ser	Ser	Ala	Asp	Pro	Glu
865					870					875					880
Gly	His	Phe	Glu	Thr	Pro	Ile	Trp	Ile	Glu	Arg	Val	Val	Ile	Ile	Gly
				885					890					895	
Ala	Gly	Lys	Pro	Ala	Ala	Val	Val	Leu	Gln	Thr	Lys	Gly	Ser	Pro	Glu
			900					905					910		
Ser	Arg	Leu	Ser	Phe	Gln	His	Asp	Pro	Glu	Thr	Ser	Val	Leu	Val	Leu
	915						920					925			
Arg	Lys	Pro	Gly	Ile	Asn	Val	Ala	Ser	Asp	Trp	Ser	Ile	His	Leu	Arg
930						935					940				944

<210> 1881

<211> 725

<212> PRT

<213> Homo sapiens

<400> 1881

Met	Lys	Thr	Glu	Gly	Gly	Lys	Val	Leu	Tyr	Lys	Val	Arg	Trp	Lys	Gly
1				5					10					15	
Tyr	Thr	Ser	Asp	Asp	Asp	Thr	Trp	Glu	Pro	Glu	Ile	His	Leu	Glu	Asp
			20					25					30		
Cys	Lys	Glu	Val	Leu	Leu	Glu	Phe	Arg	Lys	Arg	Ile	Ala	Glu	Asn	Ile
		35					40					45			
Ala	Lys	Ala	Val	Lys	Lys	Asp	Ile	Gln	Arg	Leu	Ser	Leu	Asn	Asn	Asp
	50					55					60				
Ile	Phe	Glu	Ala	Asn	Ser	Asp	Ser	Asp	Gln	Gln	Ser	Glu	Thr	Lys	Glu
65				70					75					80	
Asp	Thr	Ser	Pro	Lys	Lys	Lys	Lys	Lys	Lys	Leu	Arg	Gln	Arg	Glu	Glu
				85				90						95	
Lys	Ser	Pro	Asp	Asp	Leu	Lys	Lys	Lys	Lys	Ala	Lys	Ala	Gly	Lys	Leu
			100					105					110		
Lys	Asp	Lys	Ser	Lys	Pro	Asp	Leu	Glu	Ser	Ser	Leu	Glu	Ser	Leu	Val
	115					120					125				
Phe	Asp	Leu	Arg	Thr	Lys	Lys	Arg	Ile	Ser	Glu	Ala	Lys	Glu	Glu	Leu
130						135					140				
Lys	Glu	Ser	Lys	Lys	Pro	Lys	Lys	Asp	Glu	Val	Lys	Glu	Thr	Lys	Glu
145				150					155						160
Leu	Lys	Lys	Val	Lys	Lys	Gly	Glu	Ile	Arg	Asp	Leu	Lys	Thr	Lys	Thr
			165					170						175	
Arg	Glu	Asp	Pro	Lys	Glu	Asn	Arg	Lys	Thr	Lys	Lys	Glu	Lys	Phe	Val
			180					185					190		
Glu	Ser	Gln	Val	Glu	Ser	Glu	Ser	Ser	Val	Leu	Asn	Asp	Ser	Pro	Phe
	195					200						205			
Pro	Glu	Asp	Asp	Ser	Glu	Gly	Leu	His	Ser	Asp	Ser	Arg	Glu	Glu	Lys
	210					215					220				
Gln	Asn	Thr	Lys	Ser	Ala	Arg	Glu	Arg	Ala	Gly	Gln	Asp	Met	Gly	Leu
225					230					235					240
Glu	His	Gly	Phe	Glu	Lys	Pro	Leu	Asp	Ser	Ala	Met	Ser	Ala	Glu	Glu
			245					250						255	
Asp	Thr	Asp	Val	Arg	Gly	Arg	Arg	Lys	Lys	Lys	Thr	Pro	Arg	Lys	Ala
			260					265					270		
Glu	Asp	Thr	Arg	Glu	Asn	Arg	Lys	Leu	Glu	Asn	Lys	Asn	Ala	Phe	Leu
	275					280						285			
Glu	Lys	Lys	Thr	Val	Pro	Lys	Lys	Gln	Arg	Asn	Gln	Asp	Arg	Ser	Lys
	290					295					300				
Ser	Ala	Ala	Glu	Leu	Glu	Lys	Leu	Met	Pro	Val	Ser	Ala	Gln	Thr	Pro
305					310					315					320

Lys Gly Arg Arg Leu Ser Gly Glu Glu Arg Gly Leu Trp Ser Thr Asp
 325 330 335
 Ser Ala Glu Glu Asp Lys Glu Thr Lys Arg Asn Glu Ser Lys Glu Lys
 340 345 350
 Tyr Gln Lys Arg His Asp Ser Asp Lys Glu Glu Lys Gly Arg Lys Glu
 355 360 365
 Pro Lys Gly Leu Lys Lys Ala Ile Leu Val Gln Ala Ser Thr Ser Ser
 370 375 380
 Tyr Arg Gln Ser Gly Val Phe Ser Cys Gly Lys Gly Ala Gly Val Thr
 385 390 395 400
 Trp Ile Thr Leu Arg Leu Thr Ala Phe Ser Arg Pro Leu Ser Gln Leu
 405 410 415
 Gln Glu Ile Arg Asn Ala Phe Asp Leu Phe Lys Leu Thr Pro Glu Glu
 420 425 430
 Lys Asn Asp Val Ser Glu Asn Asn Arg Lys Arg Glu Glu Ile Pro Leu
 435 440 445
 Asp Phe Lys Thr Ile Asp Asp His Lys Thr Lys Glu Asn Lys Gln Ser
 450 455 460
 Leu Lys Glu Arg Arg Asn Thr Arg Asp Glu Thr Asp Thr Trp Ala Tyr
 465 470 475 480
 Ile Ala Ala Glu Gly Asp Gln Glu Val Leu Asp Ser Val Cys Gln Ala
 485 490 495
 Asp Glu Asn Ser Gly Ala Asn Arg Arg Leu Ile Gln Glu Ser Ser Gly
 500 505 510
 Trp His Leu Ala Gly Ala Pro Leu Gly Arg Ser Phe Gln Arg Lys Glu
 515 520 525
 Gln Ala Ala Ile Phe Ala Val Leu Gln Leu Pro Leu Val Ile Pro Arg
 530 535 540
 Gln Thr Glu Ser Gly Asp His Asn Ser Ser Pro Arg Glu Gln Asn Trp
 545 550 555 560
 Ala Glu Asn Glu Phe Asp Glu Leu Thr Glu Val Gly Phe Arg Arg Trp
 565 570 575
 Val Ile Asn Ser Ser Glu Leu Lys Glu His Val Leu Thr Gln Cys Lys
 580 585 590
 Glu Ala Lys Asn Leu Glu Lys Arg Leu Glu Glu Leu Leu Thr Arg Ile
 595 600 605
 Thr Ser Leu Gly Lys Asn Arg Asn Asp Leu Met Glu Leu Lys Thr Gln
 610 615 620
 His Glu Asn Phe Met Lys His Thr Gln Val Ser Ile Thr Lys Ser Glu
 625 630 635 640
 Arg Ser Ser Ser Pro Ala Thr Glu Gln Ser Trp Met Glu Asn Asp Phe
 645 650 655
 Asp Lys Leu Arg Glu Gly Phe Arg Arg Ser Asn Tyr Ser Glu Leu Lys
 660 665 670
 Glu Glu Val Gln Thr His Ser Lys Glu Val Lys Asn Leu Glu Lys Arg
 675 680 685
 Leu Asp Glu Trp Leu Thr Arg Ile Thr Asn Ala Glu Lys Ser Leu Lys
 690 695 700
 Asp Leu Met Glu Leu Lys Thr Lys Ala Arg Glu Leu Arg Asp Glu Arg
 705 710 715 720
 Thr Ser Leu Ser Ser
 725

<210> 1882

<211> 907

<212> PRT

<213> Homo sapiens

<400> 1882

Met Ala Gly Asn Val Lys Lys Ser Ser Gly Ala Gly Gly Gly Ser Gly
 1 5 10 15

Ser	Gly	Gly	Ser	Gly	Ser	Gly	Gly	Leu	Ile	Gly	Leu	Met	Lys	Asp	Ala
			20					25					30		
Phe	Gln	Pro	His	His	His	His	His	His	His	Leu	Ser	Pro	His	Pro	Pro
		35					40					45			
Gly	Thr	Val	Asp	Lys	Lys	Met	Val	Glu	Lys	Cys	Trp	Lys	Leu	Met	Asp
	50					55					60				
Lys	Val	Val	Arg	Leu	Cys	Gln	Asn	Pro	Lys	Leu	Ala	Leu	Lys	Asn	Ser
65					70					75					80
Pro	Pro	Tyr	Ile	Leu	Asp	Leu	Leu	Pro	Asp	Thr	Tyr	Gln	His	Leu	Arg
			85						90					95	
Thr	Ile	Leu	Ser	Arg	Tyr	Glu	Gly	Lys	Met	Glu	Thr	Leu	Gly	Glu	Asn
			100					105					110		
Glu	Tyr	Phe	Arg	Val	Phe	Met	Glu	Asn	Leu	Met	Lys	Lys	Thr	Lys	Gln
	115						120					125			
Thr	Ile	Ser	Leu	Phe	Lys	Glu	Gly	Lys	Glu	Arg	Met	Tyr	Glu	Glu	Asn
	130				135						140				
Ser	Gln	Pro	Arg	Arg	Asn	Leu	Thr	Lys	Leu	Ser	Leu	Ile	Phe	Ser	His
145					150					155					160
Met	Leu	Ala	Glu	Leu	Lys	Gly	Ile	Phe	Pro	Ser	Gly	Leu	Phe	Gln	Gly
			165						170					175	
Asp	Thr	Phe	Arg	Ile	Thr	Lys	Ala	Asp	Ala	Ala	Glu	Phe	Trp	Arg	Lys
			180					185					190		
Ala	Phe	Gly	Glu	Lys	Thr	Ile	Val	Pro	Trp	Lys	Ser	Phe	Arg	Gln	Ala
	195						200					205			
Leu	His	Glu	Val	His	Pro	Ile	Ser	Ser	Gly	Leu	Glu	Ala	Met	Ala	Leu
	210					215					220				
Lys	Ser	Thr	Ile	Asp	Leu	Thr	Cys	Asn	Asp	Tyr	Ile	Ser	Val	Phe	Glu
225				230					235						240
Phe	Asp	Ile	Phe	Thr	Arg	Leu	Phe	Gln	Pro	Trp	Ser	Ser	Leu	Leu	Arg
			245						250					255	
Asn	Trp	Asn	Ser	Leu	Ala	Val	Thr	His	Pro	Gly	Tyr	Met	Ala	Phe	Leu
		260					265						270		
Thr	Tyr	Asp	Glu	Val	Lys	Ala	Arg	Leu	Gln	Lys	Phe	Ile	His	Lys	Pro
	275						280					285			
Gly	Ser	Tyr	Ile	Phe	Arg	Leu	Ser	Cys	Thr	Arg	Leu	Gly	Gln	Trp	Ala
	290					295					300				
Ile	Gly	Tyr	Val	Thr	Ala	Asp	Gly	Asn	Ile	Leu	Gln	Thr	Ile	Pro	His
305					310					315					320
Asn	Lys	Pro	Leu	Phe	Gln	Ala	Leu	Ile	Asp	Gly	Phe	Arg	Glu	Gly	Phe
			325						330					335	
Tyr	Leu	Phe	Pro	Asp	Gly	Arg	Asn	Gln	Asn	Pro	Asp	Leu	Thr	Gly	Leu
		340					345						350		
Cys	Glu	Pro	Thr	Pro	Gln	Asp	His	Ile	Lys	Val	Thr	Gln	Glu	Gln	Tyr
	355						360					365			
Glu	Leu	Tyr	Cys	Glu	Met	Gly	Ser	Thr	Phe	Gln	Leu	Cys	Lys	Ile	Cys
	370					375					380				
Ala	Glu	Asn	Asp	Lys	Asp	Val	Lys	Ile	Glu	Pro	Cys	Gly	His	Leu	Met
385					390					395					400
Cys	Thr	Ser	Cys	Leu	Thr	Ser	Trp	Gln	Glu	Ser	Glu	Gly	Gln	Gly	Cys
			405						410					415	
Pro	Phe	Cys	Arg	Cys	Glu	Ile	Lys	Gly	Thr	Glu	Pro	Ile	Val	Val	Asp
		420						425					430		
Pro	Phe	Asp	Pro	Arg	Gly	Ser	Gly	Ser	Leu	Leu	Arg	Gln	Gly	Ala	Glu
	435						440					445			
Gly	Ala	Pro	Ser	Pro	Asn	Tyr	Asp	Asp	Asp	Asp	Asp	Glu	Arg	Ala	Asp
	450				455							460			
Asp	Thr	Leu	Phe	Met	Met	Lys	Glu	Leu	Ala	Gly	Ala	Lys	Val	Glu	Arg
465				470						475					480
Pro	Pro	Ser	Pro	Phe	Ser	Met	Ala	Pro	Gln	Ala	Ser	Leu	Pro	Pro	Val
			485					490						495	
Pro	Pro	Arg	Leu	Asp	Leu	Leu	Pro	Gln	Arg	Val	Cys	Val	Pro	Ser	Ser
		500						505					510		
Ala	Ser	Ala	Leu	Gly	Thr	Ala	Ser	Lys	Ala	Ala	Ser	Gly	Ser	Leu	His
	515						520					525			

Lys Asp Lys Pro Leu Pro Val Pro Pro Thr Leu Arg Asp Leu Pro Pro
 530 535 540
 Pro Pro Pro Pro Asp Arg Pro Tyr Ser Val Gly Ala Glu Ser Arg Pro
 545 550 555 560
 Gln Arg Arg Pro Leu Pro Cys Thr Pro Gly Asp Cys Pro Ser Arg Asp
 565 570 575
 Lys Leu Pro Pro Val Pro Ser Ser Arg Leu Gly Asp Ser Trp Leu Pro
 580 585 590
 Arg Pro Ile Pro Lys Val Pro Val Ser Ala Pro Ser Ser Ser Asp Pro
 595 600 605
 Trp Thr Gly Arg Glu Leu Thr Asn Arg His Ser Leu Pro Phe Ser Leu
 610 615 620
 Pro Ser Gln Met Glu Pro Arg Pro Asp Val Pro Arg Leu Gly Ser Thr
 625 630 635 640
 Phe Ser Leu Asp Thr Ser Met Ser Met Asn Ser Ser Pro Leu Val Gly
 645 650 655
 Pro Glu Cys Asp His Pro Lys Ile Lys Pro Ser Ser Ser Ala Asn Ala
 660 665 670
 Ile Tyr Ser Leu Ala Ala Arg Pro Leu Pro Val Pro Lys Leu Pro Pro
 675 680 685
 Gly Glu Gln Cys Glu Gly Glu Glu Asp Thr Glu Tyr Met Thr Pro Ser
 690 695 700
 Ser Arg Pro Leu Arg Pro Leu Asp Thr Ser Gln Ser Ser Arg Ala Cys
 705 710 715 720
 Asp Cys Asp Gln Gln Ile Asp Ser Cys Thr Tyr Glu Ala Met Tyr Asn
 725 730 735
 Ile Gln Ser Gln Ala Pro Ser Ile Thr Glu Ser Ser Thr Phe Gly Glu
 740 745 750
 Gly Asn Leu Ala Ala Ala His Ala Asn Thr Gly Pro Glu Glu Ser Glu
 755 760 765
 Asn Glu Asp Asp Gly Tyr Asp Val Pro Lys Pro Pro Val Pro Ala Val
 770 775 780
 Leu Ala Arg Arg Thr Leu Ser Asp Ile Ser Asn Ala Ser Ser Ser Phe
 785 790 795 800
 Gly Trp Leu Ser Leu Asp Gly Asp Pro Thr Thr Asn Val Thr Glu Gly
 805 810 815
 Ser Gln Val Pro Glu Arg Pro Pro Lys Pro Phe Pro Arg Arg Ile Asn
 820 825 830
 Ser Glu Arg Lys Ala Gly Ser Cys Gln Gln Gly Ser Gly Pro Ala Ala
 835 840 845
 Ser Ala Ala Thr Ala Ser Pro Gln Leu Ser Ser Glu Ile Glu Asn Leu
 850 855 860
 Met Ser Gln Gly Tyr Ser Tyr Gln Asp Ile Gln Lys Ala Leu Val Ile
 865 870 875 880
 Ala Gln Asn Asn Ile Glu Met Ala Lys Asn Ile Leu Arg Glu Phe Val
 885 890 895
 Ser Ile Ser Ser Pro Ala His Val Ala Thr *
 900 905 906

<210> 1883

<211> 874

<212> PRT

<213> Homo sapiens

<400> 1883

Met Asp Gly Ala Met Gly Pro Arg Gly Leu Leu Met Cys Met Tyr Leu
 1 5 10 15
 Val Ser Leu Leu Ile Leu Gln Ala Met Pro Ala Leu Gly Ser Ala Thr
 20 25 30
 Gly Arg Ser Lys Ser Ser Glu Lys Arg Gln Ala Val Asp Thr Ala Val
 35 40 45

Asp Gly Val Phe Ile Arg Ser Leu Lys Val Asn Cys Lys Val Thr Ser
 50 55 60
 Arg Phe Ala His Tyr Val Val Thr Ser Gln Val Val Asn Thr Ala Asn
 65 70 75 80
 Glu Ala Arg Glu Val Ala Phe Asp Leu Glu Ile Pro Asn Thr Gly Phe
 85 90 95
 Ile Ser Asp Phe Ala Val Thr Ala Asp Gly Asn Ala Phe Ile Gly Asp
 100 105 110
 Ile Lys Asp Lys Val Thr Ala Trp Lys Gln Tyr Arg Lys Ala Ala Ile
 115 120 125
 Ser Gly Glu Asn Ala Gly Leu Val Arg Ala Ser Gly Arg Thr Met Glu
 130 135 140
 Gln Phe Ile Ile His Leu Thr Val Asn Pro Gln Ser Lys Val Thr Phe
 145 150 155 160
 Gln Leu Thr Tyr Glu Glu Val Leu Lys Arg Asn His Met Gln Tyr Glu
 165 170 175
 Ile Val Ile Lys Val Lys Pro Lys Gln Leu Val His His Phe Glu Ile
 180 185 190
 Asp Val Asp Ile Phe Glu Pro Gln Gly Ile Ser Lys Leu Asp Ala Gln
 195 200 205
 Ala Ser Phe Leu Pro Lys Glu Leu Ala Ala Gln Thr Ile Lys Lys Ser
 210 215 220
 Phe Ser Gly Lys Lys Gly His Val Leu Phe Arg Pro Thr Val Ser Gln
 225 230 235 240
 Gln Gln Ser Cys Pro Thr Cys Ser Thr Ser Leu Leu Asn Gly His Phe
 245 250 255
 Lys Val Thr Tyr Asp Val Ser Arg Asp Lys Ile Cys Asp Leu Leu Val
 260 265 270
 Ala Asn Asn His Phe Ala His Phe Phe Ala Pro Gln Asn Leu Thr Asn
 275 280 285
 Met Asn Lys Asn Val Val Phe Val Ile Asp Ile Ser Gly Ser Met Arg
 290 295 300
 Gly Gln Lys Val Lys Gln Thr Lys Glu Ala Leu Leu Lys Ile Leu Gly
 305 310 315 320
 Asp Ile His Pro Gly Asp Tyr Phe Asp Leu Val Leu Phe Gly Thr Arg
 325 330 335
 Val Gln Ser Trp Lys Gly Ser Leu Val Gln Ala Ser Glu Ala Asn Leu
 340 345 350
 Gln Ala Ala Gln Asp Phe Val Arg Gly Phe Ser Leu Asp Glu Ala Thr
 355 360 365
 Asn Leu Asn Gly Gly Leu Leu Arg Gly Ile Glu Ile Leu Asn Gln Val
 370 375 380
 Gln Glu Ser Leu Pro Glu Leu Ser Asn His Ala Ser Ile Leu Ile Met
 385 390 395 400
 Leu Thr Asp Gly Asp Pro Thr Glu Gly Val Thr Asp Arg Ser Gln Ile
 405 410 415
 Leu Lys Asn Val Arg Asn Ala Ile Arg Gly Arg Phe Pro Leu Tyr Asn
 420 425 430
 Leu Gly Phe Gly His Asn Val Asp Phe Asn Phe Leu Glu Val Met Ser
 435 440 445
 Met Glu Asn Asn Gly Arg Ala Gln Arg Ile Tyr Glu Asp His Asp Ala
 450 455 460
 Thr Gln Gln Leu Gln Gly Phe Tyr Ser Gln Val Ala Lys Pro Leu Leu
 465 470 475 480
 Val Asp Val Asp Leu Gln Tyr Pro Gln Asp Ala Val Leu Ala Leu Thr
 485 490 495
 Gln Asn His His Lys Gln Tyr Tyr Glu Gly Ser Glu Ile Val Val Ala
 500 505 510
 Gly Arg Ile Ala Asp Asn Lys Gln Ser Ser Phe Lys Ala Asp Val Gln
 515 520 525
 Ala His Gly Glu Gly Gln Glu Phe Ser Ile Thr Cys Leu Val Asp Glu
 530 535 540
 Glu Glu Met Lys Lys Leu Leu Arg Glu Arg Gly His Met Leu Glu Asn
 545 550 555 560

His Val Glu Arg Leu Trp Ala Tyr Leu Thr Ile Gln Glu Leu Leu Ala
 565 570 575
 Lys Arg Met Lys Val Asp Arg Glu Val Arg Ala Asn Leu Ser Ser Gln
 580 585 590
 Ala Leu Arg Met Ser Leu Asp Tyr Gly Phe Val Thr Pro Leu Thr Ser
 595 600 605
 Met Ser Ile Arg Gly Met Ala Asp Gln Asp Gly Leu Lys Pro Thr Ile
 610 615 620
 Asp Lys Pro Ser Glu Asp Ser Pro Pro Leu Glu Met Leu Gly Pro Arg
 625 630 635 640
 Arg Thr Phe Val Leu Ser Ala Leu Gln Pro Ser Pro Thr His Ser Ser
 645 650 655
 Ser Asn Thr Gln Arg Leu Pro Asp Arg Val Thr Gly Gly Phe Ser Val
 660 665 670
 Asn Gly Gln Leu Ile Gly Asn Lys Ala Arg Ser Pro Gly Gln His Asp
 675 680 685
 Gly Thr Tyr Phe Gly Arg Leu Gly Ile Ala Asn Pro Ala Thr Asp Phe
 690 695 700
 Gln Leu Glu Val Thr Pro Gln Asn Ile Thr Leu Asn Pro Gly Phe Gly
 705 710 715 720
 Gly Pro Val Phe Ser Trp Arg Asp Gln Ala Val Leu Arg Gln Asp Gly
 725 730 735
 Val Val Val Thr Ile Asn Lys Lys Arg Asn Leu Val Val Ser Val Asp
 740 745 750
 Asp Gly Gly Thr Phe Glu Val Val Leu His Arg Val Trp Lys Gly Ser
 755 760 765
 Ser Val His Gln Asp Phe Leu Gly Phe Tyr Val Leu Asp Ser His Arg
 770 775 780
 Met Ser Ala Arg Thr His Gly Leu Leu Gly Gln Phe Phe His Pro Ile
 785 790 795 800
 Gly Phe Glu Val Ser Asp Ile His Pro Gly Ser Asp Pro Thr Lys Pro
 805 810 815
 Asp Ala Thr Met Val Val Arg Asn Arg Arg Leu Thr Val Thr Arg Gly
 820 825 830
 Leu Gln Lys Asp Tyr Ser Lys Asp Pro Trp His Gly Ala Glu Val Ser
 835 840 845
 Cys Trp Phe Ile His Asn Asn Gly Ala Gly Leu Ile Asp Gly Ala Tyr
 850 855 860
 Thr Asp Tyr Ile Val Pro Asp Ile Phe *
 865 870 873

<210> 1884

<211> 540

<212> PRT

<213> Homo sapiens

<400> 1884

Met Asn Leu Glu Leu Leu Glu Ser Phe Gly Gln Asn Tyr Pro Glu Glu
 1 5 10 15
 Ala Asp Gly Thr Leu Asp Cys Ile Ser Met Ala Leu Thr Cys Thr Phe
 20 25 30
 Asn Arg Trp Gly Thr Leu Leu Ala Val Gly Cys Asn Asp Gly Arg Ile
 35 40 45
 Val Ile Trp Asp Phe Leu Thr Arg Gly Ile Ala Lys Ile Lys Phe Ser
 50 55 60
 Ala His Ile His Pro Val Cys Ser Leu Cys Trp Ser Arg Asp Gly His
 65 70 75 80
 Lys Leu Val Ser Ala Ser Thr Asp Asn Ile Val Ser Gln Trp Asp Val
 85 90 95
 Leu Ser Gly Asp Cys Asp Gln Arg Phe Arg Phe Pro Ser Pro Ile Leu
 100 105 110


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<210> 1885
<211> 767
<212> PRT
<213> Homo sapiens
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3791

Met	Glu	Glu	Thr	Gln	Gly	Glu	Leu	Thr	Ser	Ser	Cys	Gly	Ser	Lys	Thr
1				5					10					15	
Met	Ala	Asn	Val	Ser	Leu	Ala	Phe	Arg	Asp	Val	Ser	Ile	Asp	Leu	Ser
			20					25					30		
Gln	Glu	Glu	Trp	Glu	Cys	Leu	Asp	Ala	Val	Gln	Arg	Asp	Leu	Tyr	Lys
			35				40					45			
Asp	Val	Met	Leu	Glu	Asn	Tyr	Ser	Asn	Leu	Val	Ser	Leu	Asp	Leu	Glu
	50					55					60				
Tyr	Lys	Tyr	Ile	Thr	Lys	Asn	Leu	Leu	Ser	Glu	Lys	Asn	Val	Cys	Lys
65					70					75					80
Ile	Tyr	Leu	Ser	Gln	Leu	Gln	Thr	Gly	Glu	Lys	Ser	Lys	Asn	Thr	Ile
				85					90					95	
His	Glu	Asp	Thr	Ile	Phe	Arg	Asn	Gly	Leu	Gln	Cys	Lys	His	Glu	Phe
			100					105					110		
Glu	Arg	Gln	Glu	Arg	His	Gln	Met	Gly	Cys	Val	Ser	Gln	Met	Leu	Ile
		115					120					125			
Gln	Lys	Gln	Ile	Ser	His	Pro	Leu	His	Pro	Lys	Ile	His	Ala	Arg	Glu
	130					135					140				
Lys	Ser	Tyr	Glu	Cys	Lys	Glu	Cys	Arg	Lys	Ala	Phe	Arg	Gln	Gln	Ser
145					150					155					160
Tyr	Leu	Ile	Gln	His	Leu	Arg	Ile	His	Thr	Gly	Glu	Arg	Pro	Tyr	Lys
				165					170					175	
Cys	Met	Glu	Cys	Gly	Lys	Ala	Phe	Cys	Arg	Val	Gly	Asp	Leu	Arg	Val
			180					185					190		
His	His	Thr	Ile	His	Ala	Gly	Glu	Arg	Pro	Tyr	Glu	Cys	Lys	Glu	Cys
		195					200					205			
Gly	Lys	Ala	Phe	Arg	Leu	His	Tyr	His	Leu	Thr	Glu	His	Gln	Arg	Ile
	210					215					220				
His	Ser	Gly	Val	Lys	Pro	Tyr	Glu	Cys	Lys	Glu	Cys	Gly	Lys	Ala	Phe
225					230					235					240
Ser	Arg	Val	Arg	Asp	Leu	Arg	Val	His	Gln	Thr	Ile	His	Ala	Gly	Glu
				245					250					255	
Arg	Pro	Tyr	Glu	Cys	Lys	Glu	Cys	Gly	Lys	Ala	Phe	Arg	Leu	His	Tyr
			260					265					270		
Gln	Leu	Thr	Glu	His	Gln	Arg	Ile	His	Thr	Gly	Glu	Arg	Pro	Tyr	Glu
		275					280					285			
Cys	Lys	Val	Cys	Gly	Lys	Thr	Phe	Arg	Val	Gln	Arg	His	Ile	Ser	Gln
	290					295					300				
His	Gln	Lys	Ile	His	Thr	Gly	Val	Lys	Pro	Tyr	Lys	Cys	Asn	Glu	Cys
305					310					315					320
Gly	Lys	Ala	Phe	Ser	His	Gly	Ser	Tyr	Leu	Val	Gln	His	Gln	Lys	Ile
				325				330						335	
His	Thr	Gly	Glu	Lys	Pro	Tyr	Glu	Cys	Lys	Glu	Cys	Gly	Lys	Ser	Phe
		340						345					350		
Ser	Phe	His	Ala	Glu	Leu	Ala	Arg	His	Arg	Arg	Ile	His	Thr	Gly	Glu
		355					360					365			
Lys	Pro	Tyr	Glu	Cys	Arg	Glu	Cys	Gly	Lys	Ala	Phe	Arg	Leu	Gln	Thr
	370					375					380				
Glu	Leu	Thr	Arg	His	His	Arg	Thr	His	Thr	Gly	Glu	Lys	Pro	Tyr	Glu
385					390					395					400
Cys	Lys	Glu	Cys	Gly	Lys	Ala	Phe	Ile	Cys	Gly	Tyr	Gln	Leu	Thr	Leu
				405				410					415		
His	Leu	Arg	Thr	His	Thr	Gly	Glu	Ile	Pro	Tyr	Glu	Cys	Lys	Glu	Cys
			420				425					430			
Gly	Lys	Thr	Phe	Ser	Ser	Arg	Tyr	His	Leu	Thr	Gln	His	Tyr	Arg	Ile
		435					440					445			
His	Thr	Gly	Glu	Lys	Pro	Tyr	Ile	Cys	Asn	Glu	Cys	Gly	Lys	Ala	Phe
	450					455					460				
Arg	Leu	Gln	Gly	Glu	Leu	Thr	Arg	His	His	Arg	Ile	His	Thr	Cys	Glu
465					470					475					480
Lys	Pro	Tyr	Glu	Cys	Lys	Glu	Cys	Gly	Lys	Ala	Phe	Ile	His	Ser	Asn
				485				490					495		
Gln	Phe	Ile	Ser	His	Gln	Arg	Ile	His	Thr	Ser	Glu	Ser	Thr	Tyr	Ile
			500					505					510		

Cys Lys Glu Cys Gly Lys Ile Phe Ser Arg Arg Tyr Asn Leu Thr Gln
 515 520 525
 His Phe Lys Ile His Thr Gly Glu Lys Pro Tyr Ile Cys Asn Glu Cys
 530 535 540
 Gly Lys Ala Phe Arg Phe Gln Thr Glu Leu Thr Gln His His Arg Ile
 545 550 555 560
 His Thr Gly Glu Lys Pro Tyr Lys Cys Thr Glu Cys Gly Lys Ala Phe
 565 570 575
 Ile Arg Ser Thr His Leu Thr Gln His His Arg Ile His Thr Gly Glu
 580 585 590
 Lys Pro Tyr Glu Cys Thr Glu Cys Gly Lys Thr Phe Ser Arg His Tyr
 595 600 605
 His Leu Thr Gln His His Arg Gly His Thr Gly Glu Lys Pro Tyr Ile
 610 615 620
 Cys Asn Glu Cys Gly Asn Ala Phe Ile Cys Ser Tyr Arg Leu Thr Leu
 625 630 635 640
 His Gln Arg Ile His Thr Gly Glu Leu Pro Tyr Glu Cys Lys Glu Cys
 645 650 655
 Gly Lys Thr Phe Ser Arg Arg Tyr His Leu Thr Gln His Phe Arg Leu
 660 665 670
 His Thr Gly Glu Lys Pro Tyr Ser Cys Lys Glu Cys Gly Asn Ala Phe
 675 680 685
 Arg Leu Gln Ala Glu Leu Thr Arg His His Ile Val His Thr Gly Glu
 690 695 700
 Lys Pro Tyr Lys Cys Lys Glu Cys Gly Lys Ala Phe Ser Val Asn Ser
 705 710 715 720
 Glu Leu Thr Arg His His Arg Ile His Thr Gly Glu Lys Pro Tyr Gln
 725 730 735
 Cys Lys Glu Cys Gly Lys Ala Phe Ile Arg Ser Asp Gln Leu Thr Leu
 740 745 750
 His Gln Arg Asn His Ile Ser Glu Glu Val Leu Cys Ile Met *
 755 760 765 766

<210> 1886

<211> 177

<212> PRT

<213> Homo sapiens

<400> 1886

Met Glu Pro Gly Ser Lys Trp Arg Arg Asn Pro Ser Asp Val Ser Asp
 1 5 10 15
 Glu Ser Asp Lys Ser Thr Ser Gly Lys Lys Asn Pro Val Ile Ser Gln
 20 25 30
 Thr Gly Ser Trp Arg Arg Gly Met Thr Ala Gln Val Gly Ile Thr Met
 35 40 45
 Pro Arg Thr Lys Ala Ser Ala Pro Ala Gly Ala Leu Lys Thr Pro Gly
 50 55 60
 Thr Gly Lys Arg Pro Gly Leu Ser Trp Pro Trp Gly Thr Asn Ala Ser
 65 70 75 80
 Ser Ser Ser Ala Val Ser Lys Asp Gly Leu Gly Phe Gln Ser Val Ser
 85 90 95
 Ser Leu His Thr Ser Cys Glu Ser Ile Asp Ile Ser Leu Ser Ser Gly
 100 105 110
 Gly Val Pro Ser His Asn Ser Ser Thr Gly Leu Ile Ala Ser Ser Lys
 115 120 125
 Asp Asp Ser Leu Thr Pro Phe Val Arg Thr Asn Ser Val Lys Thr Thr
 130 135 140
 Leu Ser Glu Arg Leu Val Leu Cys Leu Trp Leu Pro Phe Ser Glu Arg
 145 150 155 160
 His Pro Ser Lys Asn Lys Lys Ile Ser Leu Gly Ile Pro Asn Val Glu
 165 170 175 176

*

<210> 1887
 <211> 216
 <212> PRT
 <213> Homo sapiens

<400> 1887
 Met Thr Ser Arg Ser Thr Ala Arg Pro Asn Gly Gln Pro Gln Ala Ser
 1 5 10 15
 Lys Ile Cys Gln Phe Lys Leu Val Leu Leu Gly Glu Ser Ala Val Gly
 20 25 30
 Lys Ser Ser Leu Val Leu Arg Phe Val Lys Gly Gln Phe His Glu Tyr
 35 40 45
 Gln Glu Ser Thr Ile Gly Ala Ala Phe Leu Thr Gln Ser Val Cys Leu
 50 55 60
 Asp Asp Thr Thr Val Lys Phe Glu Ile Trp Asp Thr Ala Gly Gln Glu
 65 70 75 80
 Arg Tyr His Ser Leu Ala Pro Met Tyr Tyr Arg Gly Ala Gln Ala Ala
 85 90 95
 Ile Val Val Tyr Asp Ile Thr Asn Gln Glu Thr Phe Ala Arg Ala Lys
 100 105 110
 Thr Trp Val Lys Glu Leu Gln Arg Gln Ala Ser Pro Ser Ile Val Ile
 115 120 125
 Ala Leu Ala Gly Asn Lys Ala Asp Leu Ala Asn Lys Arg Met Val Glu
 130 135 140
 Tyr Glu Glu Ala Gln Ala Tyr Ala Asp Asp Asn Ser Leu Leu Phe Met
 145 150 155 160
 Glu Thr Ser Ala Lys Thr Ala Met Asn Val Asn Asp Leu Phe Leu Ala
 165 170 175
 Ile Ala Lys Lys Leu Pro Lys Ser Glu Pro Gln Asn Leu Gly Gly Ala
 180 185 190
 Ala Gly Arg Ser Arg Gly Val Asp Leu His Glu Gln Ser Gln Gln Asn
 195 200 205
 Lys Ser Gln Cys Cys Ser Asn *
 210 215

<210> 1888
 <211> 798
 <212> PRT
 <213> Homo sapiens

<400> 1888
 Met Gln Asp Gly Asn Phe Leu Leu Ser Ala Leu Gln Pro Glu Ala Gly
 1 5 10 15
 Val Cys Ser Leu Ala Leu Pro Ser Asp Leu Gln Leu Asp Arg Arg Gly
 20 25 30
 Ala Glu Gly Pro Glu Ala Glu Arg Leu Arg Ala Ala Arg Val Gln Glu
 35 40 45
 Gln Val Arg Ala Arg Leu Leu Gln Leu Gly Gln Gln Pro Arg His Asn
 50 55 60
 Gly Ala Ala Glu Pro Glu Pro Glu Ala Glu Thr Ala Arg Gly Thr Ser
 65 70 75 80
 Arg Gly Gln Tyr His Thr Leu Gln Ala Gly Phe Ser Ser Arg Ser Gln
 85 90 95
 Gly Leu Ser Gly Asp Lys Thr Ser Gly Phe Arg Pro Ile Ala Lys Pro
 100 105 110

Ala	Tyr	Ser	Pro	Ala	Ser	Trp	Ser	Ser	Arg	Ser	Ala	Val	Asp	Leu	Ser	115	120	125
Cys	Ser	Arg	Arg	Leu	Ser	Ser	Ala	His	Asn	Gly	Gly	Ser	Ala	Phe	Gly	130	135	140
Ala	Ala	Gly	Tyr	Gly	Gly	Ala	Gln	Pro	Thr	Pro	Pro	Met	Pro	Thr	Arg	145	150	155
Pro	Val	Ser	Phe	His	Glu	Arg	Gly	Gly	Val	Gly	Ser	Arg	Ala	Asp	Tyr	165	170	175
Asp	Thr	Leu	Ser	Leu	Arg	Ser	Leu	Arg	Leu	Gly	Pro	Gly	Gly	Leu	Asp	180	185	190
Asp	Arg	Tyr	Ser	Leu	Val	Ser	Glu	Gln	Leu	Glu	Pro	Ala	Ala	Thr	Ser	195	200	205
Thr	Tyr	Arg	Ala	Phe	Ala	Tyr	Glu	Arg	Gln	Ala	Ser	Ser	Ser	Ser	Ser	210	215	220
Arg	Ala	Gly	Gly	Leu	Asp	Trp	Pro	Glu	Ala	Thr	Glu	Val	Ser	Pro	Ser	225	230	235
Arg	Thr	Ile	Arg	Ala	Pro	Ala	Val	Arg	Thr	Leu	Gln	Arg	Phe	Gln	Ser	245	250	255
Ser	His	Arg	Ser	Arg	Gly	Val	Gly	Gly	Ala	Val	Pro	Gly	Ala	Val	Leu	260	265	270
Glu	Pro	Val	Ala	Arg	Ala	Pro	Ser	Val	Arg	Ser	Leu	Ser	Leu	Ser	Leu	275	280	285
Ala	Asp	Ser	Gly	His	Leu	Pro	Asp	Val	His	Gly	Phe	Asn	Ser	Tyr	Gly	290	295	300
Ser	His	Arg	Thr	Leu	Gln	Arg	Leu	Ser	Ser	Gly	Phe	Asp	Asp	Ile	Asp	305	310	315
Leu	Pro	Ser	Ala	Val	Lys	Tyr	Leu	Met	Ala	Ser	Asp	Pro	Asn	Leu	Gln	325	330	335
Val	Leu	Gly	Ala	Ala	Tyr	Ile	Gln	His	Lys	Cys	Tyr	Ser	Asp	Ala	Ala	340	345	350
Ala	Lys	Lys	Gln	Ala	Arg	Ser	Leu	Gln	Ala	Val	Pro	Arg	Leu	Val	Lys	355	360	365
Leu	Phe	Asn	His	Ala	Asn	Gln	Glu	Val	Gln	Arg	His	Ala	Thr	Gly	Ala	370	375	380
Met	Arg	Asn	Leu	Ile	Tyr	Asp	Asn	Ala	Asp	Asn	Lys	Leu	Ala	Leu	Val	385	390	395
Glu	Glu	Asn	Gly	Ile	Phe	Glu	Leu	Leu	Arg	Thr	Leu	Arg	Glu	Gln	Asp	405	410	415
Asp	Glu	Leu	Arg	Lys	Asn	Val	Thr	Gly	Ile	Leu	Trp	Asn	Leu	Ser	Ser	420	425	430
Ser	Asp	His	Leu	Lys	Asp	Arg	Leu	Ala	Arg	Asp	Thr	Leu	Glu	Gln	Leu	435	440	445
Thr	Asp	Leu	Val	Leu	Ser	Pro	Leu	Ser	Gly	Ala	Gly	Gly	Pro	Pro	Leu	450	455	460
Ile	Gln	Gln	Asn	Ala	Ser	Glu	Ala	Glu	Ile	Phe	Tyr	Asn	Ala	Thr	Gly	465	470	475
Phe	Leu	Arg	Asn	Leu	Ser	Ser	Ala	Ser	Gln	Ala	Thr	Arg	Gln	Lys	Met	485	490	495
Arg	Glu	Cys	His	Gly	Leu	Val	Asp	Ala	Leu	Val	Thr	Ser	Ile	Asn	His	500	505	510
Ala	Leu	Asp	Ala	Gly	Lys	Cys	Glu	Asp	Lys	Ser	Val	Glu	Asn	Ala	Val	515	520	525
Cys	Val	Leu	Arg	Asn	Leu	Ser	Tyr	Arg	Leu	Tyr	Asp	Glu	Met	Pro	Pro	530	535	540
Ser	Ala	Leu	Gln	Arg	Leu	Glu	Gly	Arg	Gly	Arg	Arg	Asp	Leu	Ala	Gly	545	550	555
Ala	Pro	Pro	Gly	Glu	Val	Val	Gly	Cys	Phe	Thr	Pro	Gln	Ser	Arg	Arg	565	570	575
Leu	Arg	Glu	Leu	Pro	Leu	Ala	Ala	Asp	Ala	Leu	Thr	Phe	Ala	Glu	Val	580	585	590
Ser	Lys	Asp	Pro	Lys	Gly	Leu	Glu	Trp	Leu	Trp	Ser	Pro	Gln	Ile	Val	595	600	605
Gly	Leu	Tyr	Asn	Arg	Leu	Leu	Gln	Arg	Cys	Glu	Leu	Asn	Arg	His	Thr	610	615	620

Thr	Glu	Ala	Ala	Ala	Gly	Ala	Leu	Gln	Asn	Ile	Thr	Ala	Gly	Asp	Arg
625					630					635					640
Arg	Trp	Ala	Gly	Val	Leu	Ser	Arg	Leu	Ala	Leu	Glu	Gln	Glu	Arg	Ile
				645					650						655
Leu	Asn	Pro	Leu	Leu	Asp	Arg	Val	Arg	Thr	Ala	Asp	His	His	Gln	Leu
			660					665						670	
Arg	Ser	Leu	Thr	Gly	Leu	Ile	Arg	Asn	Leu	Ser	Arg	Asn	Ala	Arg	Asn
		675					680					685			
Lys	Asp	Glu	Met	Ser	Thr	Lys	Val	Val	Ser	His	Leu	Ile	Glu	Lys	Leu
	690					695					700				
Pro	Gly	Ser	Val	Gly	Glu	Lys	Ser	Pro	Pro	Ala	Glu	Val	Leu	Val	Asn
705					710					715					720
Ile	Ile	Ala	Val	Leu	Asn	Asn	Leu	Val	Val	Ala	Ser	Pro	Ile	Ala	Ala
				725					730					735	
Arg	Asp	Leu	Leu	Tyr	Phe	Asp	Gly	Leu	Arg	Lys	Leu	Ile	Phe	Ile	Lys
			740					745					750		
Lys	Lys	Arg	Asp	Ser	Pro	Asp	Ser	Glu	Lys	Ser	Ser	Arg	Ala	Ala	Ser
		755					760					765			
Ser	Leu	Leu	Ala	Asn	Leu	Trp	Gln	Tyr	Asn	Lys	Leu	His	Arg	Asp	Phe
	770				775						780				
Arg	Ala	Lys	Gly	Tyr	Arg	Lys	Glu	Asp	Phe	Leu	Gly	Pro	*		
785					790					795		797			

<210> 1889
 <211> 184
 <212> PRT
 <213> Homo sapiens

<400> 1889

Met	Glu	Lys	Arg	Glu	Leu	Lys	Ala	Ser	Val	Pro	Lys	Phe	Asp	Lys	Ile
1				5					10					15	
Pro	Trp	Leu	Ser	Glu	Ala	Ser	Leu	Val	Asn	Lys	Pro	Leu	Val	Leu	Ser
			20					25					30		
Leu	Pro	Arg	Arg	Tyr	Pro	His	Thr	Ser	Ala	Thr	Phe	Leu	Thr	Ser	Ser
		35					40					45			
Lys	Lys	Asn	Met	Asn	Leu	Pro	Ile	Leu	Phe	Gln	Val	Pro	Asp	Val	Leu
	50					55					60				
Ser	Lys	Ala	Arg	Arg	Asn	Gln	Cys	Asp	Ser	Met	Leu	Leu	Arg	Asn	Gln
65					70				75						80
Gln	Leu	Cys	Ser	Thr	Cys	Gln	Glu	Met	Lys	Met	Val	Gln	Pro	Arg	Thr
			85						90					95	
Met	Lys	Ile	Pro	Asp	Asp	Pro	Lys	Ala	Ser	Phe	Glu	Asn	Cys	Met	Ser
			100					105					110		
Tyr	Arg	Met	Ser	Leu	His	Gln	Pro	Lys	Phe	Gln	Thr	Thr	Pro	Glu	Pro
		115					120						125		
Phe	His	Asp	Asp	Ile	Pro	Thr	Glu	Asn	Ile	His	Tyr	Arg	Leu	Pro	Ile
	130					135					140				
Leu	Gly	Pro	Arg	Thr	Ala	Val	Phe	His	Gly	Leu	Leu	Thr	Glu	Ala	Tyr
145					150					155					160
Lys	Thr	Leu	Lys	Glu	Arg	Gln	Arg	Ser	Ser	Leu	Pro	Arg	Lys	Glu	Pro
			165						170					175	
Ile	Gly	Lys	Thr	Thr	Arg	Gln	*								
			180			183									

<210> 1890
 <211> 1069
 <212> PRT
 <213> Homo sapiens

<400> 1890

Met	Ala	Pro	Arg	Lys	Arg	Gly	Gly	Arg	Gly	Ile	Ser	Phe	Ile	Phe	Cys
1				5					10					15	
Cys	Phe	Arg	Asn	Asn	Asp	His	Pro	Glu	Ile	Thr	Tyr	Arg	Leu	Arg	Asn
			20					25					30		
Asp	Ser	Asn	Phe	Ala	Leu	Gln	Thr	Met	Glu	Pro	Ala	Leu	Pro	Met	Pro
		35				40						45			
Pro	Val	Glu	Glu	Leu	Asp	Val	Met	Phe	Ser	Glu	Leu	Val	Asp	Glu	Leu
	50				55						60				
Asp	Leu	Thr	Asp	Lys	His	Arg	Glu	Ala	Met	Phe	Ala	Leu	Pro	Ala	Glu
65					70					75					80
Lys	Lys	Trp	Gln	Ile	Tyr	Cys	Ser	Lys	Lys	Lys	Asp	Gln	Glu	Glu	Asn
			85						90					95	
Lys	Gly	Ala	Thr	Ser	Trp	Pro	Glu	Phe	Tyr	Ile	Asp	Gln	Leu	Asn	Ser
			100					105					110		
Met	Ala	Ala	Arg	Lys	Ser	Leu	Leu	Ala	Leu	Glu	Lys	Glu	Glu	Glu	Glu
	115						120					125			
Glu	Arg	Ser	Lys	Thr	Ile	Glu	Ser	Leu	Lys	Thr	Ala	Leu	Arg	Thr	Lys
	130					135					140				
Pro	Met	Arg	Phe	Val	Thr	Arg	Phe	Ile	Asp	Leu	Asp	Gly	Leu	Ser	Cys
145					150				155						160
Ile	Leu	Asn	Phe	Leu	Lys	Thr	Met	Asp	Tyr	Glu	Thr	Ser	Glu	Ser	Arg
			165						170					175	
Ile	His	Thr	Ser	Leu	Ile	Gly	Cys	Ile	Lys	Ala	Leu	Met	Asn	Asn	Ser
			180					185					190		
Gln	Gly	Arg	Ala	His	Val	Leu	Ala	His	Ser	Glu	Ser	Ile	Asn	Val	Ile
	195						200					205			
Ala	Gln	Ser	Leu	Ser	Thr	Glu	Asn	Ile	Lys	Thr	Lys	Val	Ala	Val	Leu
	210					215					220				
Glu	Ile	Leu	Gly	Ala	Val	Cys	Leu	Val	Pro	Gly	Gly	His	Lys	Lys	Val
225					230					235					240
Leu	Gln	Ala	Met	Leu	His	Tyr	Gln	Lys	Tyr	Ala	Ser	Glu	Arg	Thr	Arg
			245						250					255	
Phe	Gln	Thr	Leu	Ile	Asn	Asp	Leu	Asp	Lys	Ser	Thr	Gly	Arg	Tyr	Arg
			260					265					270		
Asp	Glu	Val	Ser	Leu	Lys	Thr	Ala	Ile	Met	Ser	Phe	Ile	Asn	Ala	Val
	275						280					285			
Leu	Ser	Gln	Gly	Ala	Gly	Val	Glu	Ser	Leu	Asp	Phe	Arg	Leu	His	Leu
	290					295				300					
Arg	Tyr	Glu	Phe	Leu	Met	Leu	Gly	Ile	Gln	Pro	Val	Ile	Asp	Lys	Leu
305					310				315						320
Arg	Glu	His	Glu	Asn	Ser	Thr	Leu	Asp	Arg	His	Leu	Asp	Phe	Phe	Glu
			325						330					335	
Met	Leu	Arg	Asn	Glu	Asp	Glu	Leu	Glu	Phe	Ala	Lys	Arg	Phe	Glu	Leu
			340					345					350		
Val	His	Ile	Asp	Thr	Lys	Ser	Ala	Thr	Gln	Met	Phe	Glu	Leu	Thr	Arg
	355						360					365			
Lys	Arg	Leu	Thr	His	Ser	Glu	Ala	Tyr	Pro	His	Phe	Met	Ser	Ile	Leu
	370					375					380				
His	His	Cys	Leu	Gln	Met	Pro	Tyr	Lys	Arg	Ser	Gly	Asn	Thr	Val	Gln
385					390				395						400
Tyr	Trp	Leu	Leu	Leu	Asp	Arg	Ile	Ile	Gln	Gln	Ile	Val	Ile	Gln	Asn
			405						410					415	
Asp	Lys	Gly	Gln	Asp	Pro	Asp	Ser	Thr	Pro	Leu	Glu	Asn	Phe	Asn	Ile
			420					425					430		
Lys	Asn	Val	Val	Arg	Met	Leu	Val	Asn	Glu	Asn	Glu	Val	Lys	Gln	Trp
	435						440					445			
Lys	Glu	Gln	Ala	Glu	Lys	Met	Arg	Lys	Glu	His	Asn	Glu	Leu	Gln	Gln
	450					455					460				
Lys	Leu	Glu	Lys	Lys	Glu	Arg	Glu	Cys	Asp	Ala	Lys	Thr	Gln	Glu	Lys
465					470				475						480
Glu	Glu	Met	Met	Gln	Thr	Leu	Asn	Lys	Met	Lys	Glu	Lys	Leu	Glu	Lys
			485						490					495	

Glu	Thr	Thr	Glu	His	Lys	Gln	Val	Lys	Gln	Gln	Val	Ala	Asp	Leu	Thr
			500					505					510		
Ala	Gln	Leu	His	Glu	Leu	Ser	Arg	Arg	Ala	Val	Cys	Ala	Ser	Ile	Pro
		515					520					525			
Gly	Gly	Pro	Ser	Pro	Gly	Ala	Pro	Gly	Gly	Pro	Phe	Pro	Ser	Ser	Val
	530					535					540				
Pro	Gly	Ser	Leu	Leu	Pro	Pro	Pro	Pro	Pro	Pro	Pro	Leu	Pro	Gly	Gly
545					550					555					560
Met	Leu	Pro	Pro	Pro	Pro	Pro	Pro	Leu	Pro	Pro	Gly	Gly	Pro	Pro	Pro
				565					570					575	
Pro	Pro	Gly	Pro	Pro	Pro	Leu	Gly	Ala	Ile	Met	Pro	Pro	Pro	Gly	Ala
			580					585					590		
Pro	Met	Gly	Leu	Ala	Leu	Lys	Lys	Lys	Ser	Ile	Pro	Gln	Pro	Thr	Asn
		595					600					605			
Ala	Leu	Lys	Ser	Phe	Asn	Trp	Ser	Lys	Leu	Pro	Glu	Asn	Lys	Leu	Glu
	610					615					620				
Gly	Thr	Val	Trp	Thr	Glu	Ile	Asp	Asp	Thr	Lys	Val	Phe	Lys	Ile	Leu
625					630					635					640
Asp	Leu	Glu	Asp	Leu	Glu	Arg	Thr	Phe	Ser	Ala	Tyr	Gln	Arg	Gln	Gln
				645					650					655	
Lys	Glu	Ala	Asp	Ala	Ile	Asp	Asp	Thr	Leu	Ser	Ser	Lys	Leu	Lys	Val
			660					665					670		
Lys	Glu	Leu	Ser	Val	Ile	Asp	Gly	Arg	Arg	Ala	Gln	Asn	Cys	Asn	Ile
	675						680					685			
Leu	Leu	Ser	Arg	Leu	Lys	Leu	Ser	Asn	Asp	Glu	Ile	Lys	Arg	Ala	Ile
	690					695						700			
Leu	Thr	Met	Asp	Glu	Gln	Glu	Asp	Leu	Pro	Lys	Asp	Met	Leu	Glu	Gln
705					710					715					720
Leu	Leu	Lys	Phe	Val	Pro	Glu	Lys	Ser	Asp	Ile	Asp	Leu	Leu	Glu	Glu
				725					730					735	
His	Lys	His	Glu	Leu	Asp	Arg	Met	Ala	Lys	Ala	Asp	Arg	Phe	Leu	Phe
			740					745					750		
Glu	Met	Ser	Arg	Ile	Asn	His	Tyr	Gln	Gln	Arg	Leu	Gln	Ser	Leu	Tyr
	755					760						765			
Phe	Lys	Lys	Lys	Phe	Ala	Glu	Arg	Val	Ala	Glu	Val	Lys	Pro	Lys	Val
	770					775					780				
Glu	Ala	Ile	Arg	Ser	Gly	Ser	Glu	Glu	Val	Phe	Arg	Ser	Gly	Ala	Leu
785					790					795					800
Lys	Gln	Leu	Leu	Glu	Val	Val	Leu	Ala	Phe	Gly	Asn	Tyr	Met	Asn	Lys
				805					810					815	
Gly	Gln	Arg	Gly	Asn	Ala	Tyr	Gly	Phe	Lys	Ile	Ser	Ser	Leu	Asn	Lys
			820					825					830		
Ile	Ala	Asp	Thr	Lys	Ser	Ser	Ile	Asp	Lys	Asn	Ile	Thr	Leu	Leu	His
	835						840					845			
Tyr	Leu	Ile	Thr	Ile	Val	Glu	Asn	Lys	Tyr	Pro	Ser	Val	Leu	Asn	Leu
	850					855						860			
Asn	Glu	Glu	Leu	Arg	Asp	Ile	Pro	Gln	Ala	Ala	Lys	Val	Asn	Met	Thr
865					870					875					880
Glu	Leu	Asp	Lys	Glu	Ile	Ser	Thr	Leu	Arg	Ser	Gly	Leu	Lys	Ala	Val
				885					890					895	
Glu	Thr	Glu	Leu	Glu	Tyr	Gln	Lys	Ser	Gln	Pro	Pro	Gln	Pro	Gly	Asp
			900					905						910	
Lys	Phe	Val	Ser	Val	Val	Ser	Gln	Phe	Ile	Thr	Val	Ala	Ser	Phe	Ser
	915						920					925			
Phe	Ser	Asp	Val	Glu	Asp	Leu	Leu	Ala	Glu	Ala	Lys	Asp	Leu	Phe	Thr
	930					935						940			
Lys	Ala	Val	Lys	His	Phe	Gly	Glu	Glu	Ala	Gly	Lys	Ile	Gln	Pro	Asp
945					950					955					960
Glu	Phe	Phe	Gly	Ile	Phe	Asp	Gln	Phe	Leu	Gln	Ala	Val	Ser	Glu	Ala
				965					970					975	
Lys	Gln	Glu	Asn	Glu	Asn	Met	Arg	Lys	Lys	Lys	Glu	Glu	Glu	Glu	Arg
			980					985						990	
Arg	Ala	Arg	Met	Glu	Ala	Gln	Leu	Lys	Glu	Gln	Arg	Glu	Arg	Glu	Arg
	995					1000						1005			

Lys Met Arg Lys Ala Lys Glu Asn Ser Glu Glu Ser Gly Glu Phe Asp
 1010 1015 1020
 Asp Leu Val Ser Ala Leu Arg Ser Gly Glu Val Phe Asp Lys Asp Leu
 1025 1030 1035 1040
 Ser Lys Leu Lys Arg Asn Arg Lys Arg Ile Thr Asn Gln Met Thr Asp
 1045 1050 1055
 Ser Ser Arg Glu Arg Pro Ile Thr Lys Leu Asn Phe *
 1060 1065 1068

<210> 1891

<211> 521

<212> PRT

<213> Homo sapiens

<400> 1891

Met Ser Leu Glu Gly Pro Ala Gln Pro Gln Tyr Ser Pro Val Gln Ala
 1 5 10 15
 Thr Phe Glu Val Leu Asp Phe Ile Thr His Leu Tyr Ala Gly Ala Asp
 20 25 30
 Val His Arg His Leu Asp Val Arg Ile Leu Leu Thr Asn Ile Arg Thr
 35 40 45
 Lys Ser Thr Phe Leu Pro Pro Leu Pro Thr Ser Val Gln Asn Leu Ala
 50 55 60
 His Pro Pro Glu Val Val Leu Thr Asp Phe Gln Thr Leu Asp Gly Ser
 65 70 75 80
 Gln Tyr Asn Pro Val Lys Gln Gln Leu Val Arg Tyr Ala Thr Ser Cys
 85 90 95
 Tyr Ser Cys Cys Pro Arg Leu Ala Ser Val Leu Leu Tyr Ser Asp Tyr
 100 105 110
 Gly Ile Gly Glu Val Pro Val Glu Pro Leu Asp Val Pro Leu Pro Ser
 115 120 125
 Thr Ile Arg Pro Ala Ser Pro Val Ala Gly Ser Pro Lys Gln Pro Val
 130 135 140
 Arg Gly Tyr Tyr Arg Gly Ala Val Gly Gly Thr Phe Asp Arg Leu His
 145 150 155 160
 Asn Ala His Lys Val Leu Leu Ser Val Ala Cys Ile Leu Ala Gln Glu
 165 170 175
 Gln Leu Val Val Gly Val Ala Asp Lys Asp Leu Leu Lys Ser Lys Leu
 180 185 190
 Leu Pro Glu Leu Leu Gln Pro Tyr Thr Glu Arg Val Glu His Leu Ser
 195 200 205
 Glu Phe Leu Val Asp Ile Lys Pro Ser Leu Thr Phe Asp Val Ile Pro
 210 215 220
 Leu Leu Asp Pro Tyr Gly Pro Ala Gly Ser Asp Pro Ser Leu Glu Phe
 225 230 235 240
 Leu Val Val Ser Glu Glu Thr Tyr Arg Gly Gly Met Ala Ile Asn Arg
 245 250 255
 Phe Arg Leu Glu Asn Asp Leu Glu Glu Leu Ala Leu Tyr Gln Ile Gln
 260 265 270
 Leu Leu Lys Asp Leu Arg His Thr Glu Asn Glu Glu Asp Lys Val Ser
 275 280 285
 Ser Ser Ser Phe Arg Gln Arg Met Leu Gly Asn Leu Leu Arg Pro Pro
 290 295 300
 Tyr Glu Arg Pro Glu Leu Pro Thr Cys Leu Tyr Val Ile Gly Leu Thr
 305 310 315 320
 Gly Ile Ser Gly Ser Gly Lys Ser Ser Ile Ala Gln Arg Leu Lys Gly
 325 330 335
 Leu Gly Ala Phe Val Ile Asp Ser Asp His Leu Gly His Arg Ala Tyr
 340 345 350
 Ala Pro Gly Gly Pro Ala Tyr Gln Pro Val Val Glu Ala Phe Gly Thr
 355 360 365

Asp Ile Leu His Lys Asp Gly Ile Ile Asn Arg Lys Val Leu Gly Ser
 370 375 380
 Arg Val Phe Gly Asn Lys Lys Gln Leu Lys Ile Leu Thr Asp Ile Met
 385 390 395 400
 Trp Pro Ile Ile Ala Lys Leu Ala Arg Glu Glu Met Asp Arg Ala Val
 405 410 415
 Ala Glu Gly Lys Arg Val Cys Val Ile Asp Ala Ala Val Leu Leu Glu
 420 425 430
 Ala Gly Trp Gln Asn Leu Val His Glu Val Trp Thr Ala Val Ile Pro
 435 440 445
 Glu Thr Glu Ala Val Arg Arg Ile Val Glu Arg Asp Gly Leu Ser Glu
 450 455 460
 Ala Ala Ala Gln Ser Arg Leu Gln Ser Gln Met Ser Gly Gln Gln Leu
 465 470 475 480
 Val Glu Gln Ser His Val Val Leu Ser Thr Leu Trp Glu Pro His Ile
 485 490 495
 Thr Gln Arg Gln Val Glu Lys Ala Trp Ala Leu Leu Gln Lys Arg Ile
 500 505 510
 Pro Lys Thr His Gln Ala Leu Asp *
 515 520

<210> 1892
 <211> 1331
 <212> PRT
 <213> Homo sapiens

<400> 1892
 Met Glu Asp Gly Gly Leu Thr Ala Phe Glu Glu Asp Gln Arg Cys Leu
 1 5 10 15
 Ser Gln Ser Leu Pro Leu Pro Val Ser Ala Glu Gly Pro Ala Ala Gln
 20 25 30
 Thr Thr Ala Glu Pro Ser Arg Ser Phe Ser Ser Ala His Arg His Leu
 35 40 45
 Ser Arg Arg Asn Gly Leu Ser Arg Leu Cys Gln Ser Arg Thr Ala Leu
 50 55 60
 Ser Glu Asp Arg Trp Ser Ser Tyr Cys Leu Ser Ser Leu Ala Ala Gln
 65 70 75 80
 Asn Ile Cys Thr Ser Lys Leu His Cys Pro Ala Ala Pro Glu His Thr
 85 90 95
 Asp Pro Ser Glu Pro Arg Gly Ser Val Ser Cys Cys Ser Leu Leu Arg
 100 105 110
 Gly Leu Ser Ser Gly Trp Ser Ser Pro Leu Leu Pro Ala Pro Val Cys
 115 120 125
 Asn Pro Asn Lys Ala Ile Phe Thr Val Asp Ala Lys Thr Thr Glu Ile
 130 135 140
 Leu Val Ala Asn Asp Lys Ala Cys Gly Leu Leu Gly Tyr Ser Ser Gln
 145 150 155 160
 Asp Leu Ile Gly Gln Lys Leu Thr Gln Phe Phe Leu Arg Ser Asp Ser
 165 170 175
 Asp Val Val Glu Ala Leu Ser Glu Glu His Met Glu Ala Asp Gly His
 180 185 190
 Ala Ala Val Val Phe Gly Thr Val Val Asp Ile Ile Ser Arg Ser Gly
 195 200 205
 Glu Lys Ile Pro Val Ser Val Trp Met Lys Arg Met Arg Gln Glu Arg
 210 215 220
 Arg Leu Cys Cys Val Val Leu Glu Pro Val Glu Arg Val Ser Thr
 225 230 235 240
 Trp Val Ala Phe Gln Ser Asp Gly Thr Val Thr Ser Cys Asp Ser Leu
 245 250 255
 Phe Ala His Leu His Gly Tyr Val Ser Gly Glu Asp Val Ala Gly Gln
 260 265 270

His Ile Thr Asp Leu Ile Pro Ser Val Gln Leu Pro Pro Ser Gly Gln
 275 280 285
 His Ile Pro Lys Asn Leu Lys Ile Gln Arg Ser Val Gly Arg Ala Arg
 290 295 300
 Asp Gly Thr Thr Phe Pro Leu Ser Leu Lys Leu Lys Ser Gln Pro Ser
 305 310 315 320
 Ser Glu Glu Ala Thr Thr Gly Glu Ala Ala Pro Val Ser Gly Tyr Arg
 325 330 335
 Ala Ser Val Trp Val Phe Cys Thr Ile Ser Gly Leu Ile Thr Leu Leu
 340 345 350
 Pro Asp Gly Thr Ile His Gly Ile Asn His Ser Phe Ala Leu Thr Leu
 355 360 365
 Phe Gly Tyr Gly Lys Thr Glu Leu Leu Gly Lys Asn Ile Thr Phe Leu
 370 375 380
 Ile Pro Gly Phe Tyr Ser Tyr Met Asp Leu Ala Tyr Asn Ser Ser Leu
 385 390 395 400
 Gln Leu Pro Asp Leu Ala Ser Cys Leu Asp Val Gly Asn Glu Ser Gly
 405 410 415
 Cys Gly Glu Arg Thr Leu Asp Pro Trp Gln Gly Gln Asp Pro Ala Glu
 420 425 430
 Gly Gly Gln Asp Pro Arg Ile Asn Val Val Leu Ala Gly Gly His Val
 435 440 445
 Val Pro Arg Asp Glu Ile Arg Lys Leu Met Glu Ser Gln Asp Ile Phe
 450 455 460
 Thr Gly Thr Gln Thr Glu Leu Ile Ala Gly Gly Gln Leu Leu Ser Cys
 465 470 475 480
 Leu Ser Pro Gln Pro Ala Pro Gly Val Asp Asn Val Pro Glu Gly Ser
 485 490 495
 Leu Pro Val His Gly Glu Gln Ala Leu Pro Lys Asp Gln Gln Ile Thr
 500 505 510
 Ala Leu Gly Arg Glu Glu Pro Val Ala Ile Glu Ser Pro Gly Gln Asp
 515 520 525
 Leu Leu Gly Glu Ser Arg Ser Glu Pro Val Asp Val Lys Pro Phe Ala
 530 535 540
 Ser Cys Glu Asp Ser Glu Ala Pro Val Pro Ala Glu Asp Gly Gly Ser
 545 550 555 560
 Asp Ala Gly Met Cys Gly Leu Cys Gln Lys Ala Gln Leu Glu Arg Met
 565 570 575
 Gly Val Ser Gly Pro Ser Gly Ser Asp Leu Trp Ala Gly Ala Ala Val
 580 585 590
 Ala Lys Pro Gln Ala Lys Gly Gln Leu Ala Gly Gly Ser Leu Leu Met
 595 600 605
 His Cys Pro Cys Tyr Gly Ser Glu Trp Gly Leu Trp Trp Arg Ser Gln
 610 615 620
 Asp Leu Ala Pro Ser Pro Ser Gly Met Ala Gly Leu Ser Phe Gly Thr
 625 630 635 640
 Pro Thr Leu Asp Glu Pro Trp Leu Gly Val Glu Asn Asp Arg Glu Glu
 645 650 655
 Leu Gln Thr Cys Leu Ile Lys Glu Gln Leu Ser Gln Leu Ser Leu Ala
 660 665 670
 Gly Ala Leu Asp Val Pro His Ala Glu Leu Val Pro Thr Glu Cys Gln
 675 680 685
 Ala Val Thr Ala Pro Val Ser Ser Cys Asp Leu Gly Gly Arg Asp Leu
 690 695 700
 Cys Gly Gly Cys Thr Gly Ser Ser Ser Ala Cys Tyr Ala Leu Ala Thr
 705 710 715 720
 Asp Leu Pro Gly Gly Leu Glu Ala Val Glu Ala Gln Glu Val Asp Val
 725 730 735
 Asn Ser Phe Ser Trp Asn Leu Lys Glu Leu Phe Phe Ser Asp Gln Thr
 740 745 750
 Asp Gln Thr Ser Ser Asn Cys Ser Cys Ala Thr Ser Glu Leu Arg Glu
 755 760 765
 Thr Pro Ser Ser Leu Ala Val Gly Ser Asp Pro Asp Val Gly Ser Leu
 770 775 780

Gln	Glu	Gln	Gly	Ser	Cys	Val	Leu	Asp	Asp	Arg	Glu	Leu	Leu	Leu	Leu
785					790					795					800
Thr	Gly	Thr	Cys	Val	Asp	Leu	Gly	Gln	Gly	Arg	Arg	Phe	Arg	Glu	Ser
			805						810					815	
Cys	Val	Gly	His	Asp	Pro	Thr	Glu	Pro	Leu	Glu	Val	Cys	Leu	Val	Ser
			820					825					830		
Ser	Glu	His	Tyr	Ala	Ala	Ser	Asp	Arg	Glu	Ser	Pro	Gly	His	Val	Pro
	835						840					845			
Ser	Thr	Leu	Asp	Ala	Gly	Pro	Glu	Asp	Thr	Cys	Pro	Ser	Ala	Glu	Glu
	850					855					860				
Pro	Arg	Leu	Asn	Val	Gln	Val	Thr	Ser	Thr	Pro	Val	Ile	Val	Met	Arg
865					870					875					880
Gly	Ala	Ala	Gly	Leu	Gln	Arg	Glu	Ile	Gln	Glu	Gly	Ala	Tyr	Ser	Gly
			885						890					895	
Ser	Cys	Tyr	His	Arg	Asp	Gly	Leu	Arg	Leu	Ser	Ile	Gln	Phe	Glu	Val
			900					905					910		
Arg	Arg	Val	Glu	Leu	Gln	Gly	Pro	Thr	Pro	Leu	Phe	Cys	Cys	Trp	Leu
		915					920						925		
Val	Lys	Asp	Leu	Leu	His	Ser	Gln	Arg	Asp	Ser	Ala	Ala	Arg	Thr	Arg
	930					935					940				
Leu	Phe	Leu	Ala	Ser	Leu	Pro	Gly	Ser	Thr	His	Ser	Thr	Ala	Ala	Glu
945					950					955					960
Leu	Thr	Gly	Pro	Ser	Leu	Val	Glu	Val	Leu	Arg	Ala	Arg	Pro	Trp	Phe
			965						970					975	
Glu	Glu	Pro	Pro	Lys	Ala	Val	Glu	Leu	Glu	Gly	Leu	Ala	Ala	Cys	Glu
			980					985					990		
Gly	Glu	Tyr	Ser	Gln	Lys	Tyr	Ser	Thr	Met	Ser	Pro	Leu	Gly	Ser	Gly
	995					1000						1005			
Ala	Phe	Gly	Phe	Val	Trp	Thr	Ala	Val	Asp	Lys	Glu	Lys	Asn	Lys	Glu
	1010					1015					1020				
Val	Val	Val	Lys	Phe	Ile	Lys	Lys	Glu	Lys	Val	Leu	Glu	Asp	Cys	Trp
1025				1030						1035					1040
Ile	Glu	Asp	Pro	Lys	Leu	Gly	Lys	Val	Thr	Leu	Glu	Ile	Ala	Ile	Leu
			1045						1050					1055	
Ser	Arg	Val	Glu	His	Ala	Asn	Ile	Ile	Lys	Val	Leu	Asp	Ile	Phe	Glu
		1060						1065					1070		
Asn	Gln	Gly	Phe	Phe	Gln	Leu	Val	Met	Glu	Lys	His	Gly	Ser	Gly	Leu
	1075					1080						1085			
Asp	Leu	Phe	Ala	Phe	Ile	Asp	Arg	His	Pro	Arg	Leu	Asp	Glu	Pro	Leu
	1090				1095						1100				
Ala	Ser	Tyr	Ile	Phe	Arg	Gln	Val	Arg	Ala	Gly	Gln	Ser	Arg	Leu	Val
1105				1110						1115				1120	
Ser	Ala	Val	Gly	Tyr	Leu	Arg	Leu	Lys	Asp	Ile	Ile	His	Arg	Asp	Ile
			1125						1130					1135	
Lys	Asp	Glu	Asn	Ile	Val	Ile	Ala	Glu	Asp	Phe	Thr	Ile	Lys	Leu	Ile
		1140						1145					1150		
Asp	Phe	Gly	Ser	Ala	Ala	Tyr	Leu	Glu	Arg	Gly	Lys	Leu	Phe	Tyr	Thr
	1155					1160					1165				
Phe	Cys	Gly	Thr	Ile	Glu	Tyr	Cys	Ala	Pro	Glu	Val	Leu	Met	Gly	Asn
	1170				1175						1180				
Pro	Tyr	Arg	Gly	Pro	Glu	Leu	Glu	Met	Trp	Ser	Leu	Gly	Val	Thr	Leu
1185				1190						1195					1200
Tyr	Thr	Leu	Val	Phe	Glu	Glu	Asn	Pro	Phe	Cys	Glu	Leu	Glu	Glu	Thr
			1205						1210					1215	
Val	Glu	Ala	Ala	Ile	His	Pro	Pro	Tyr	Leu	Val	Ser	Lys	Glu	Leu	Met
		1220						1225					1230		
Ser	Leu	Val	Ser	Gly	Leu	Leu	Gln	Pro	Val	Pro	Glu	Arg	Arg	Thr	Thr
		1235					1240					1245			
Leu	Glu	Lys	Leu	Val	Thr	Asp	Pro	Trp	Val	Thr	Gln	Pro	Val	Asn	Leu
	1250					1255					1260				
Ala	Asp	Tyr	Thr	Trp	Glu	Glu	Val	Phe	Arg	Val	Asn	Lys	Pro	Glu	Ser
1265				1270					1275					1280	
Gly	Val	Leu	Ser	Ala	Ala	Ser	Leu	Glu	Met	Gly	Asn	Arg	Ser	Leu	Ser
			1285						1290					1295	

Asp Val Ala Gln Ala Gln Glu Leu Cys Gly Gly Pro Val Pro Gly Glu
 1300 1305 1310
 Ala Pro Asn Gly Gln Gly Cys Leu His Pro Gly Asp Pro Arg Leu Leu
 1315 1320 1325
 Thr Ser *
 1330

<210> 1893
 <211> 1324
 <212> PRT
 <213> Homo sapiens

<400> 1893
 Met Glu Asp Gly Gly Leu Thr Ala Phe Glu Glu Asp Gln Arg Cys Leu
 1 5 10 15
 Ser Gln Ser Leu Pro Leu Pro Val Ser Ala Glu Gly Pro Ala Ala Gln
 20 25 30
 Thr Thr Ala Glu Pro Ser Arg Ser Phe Ser Ser Ala His Arg His Leu
 35 40 45
 Ser Arg Arg Asn Gly Leu Ser Arg Leu Cys Gln Ser Arg Thr Ala Leu
 50 55 60
 Ser Glu Asp Arg Trp Ser Tyr Cys Leu Ser Ser Leu Ala Ala Gln
 65 70 75 80
 Asn Ile Cys Thr Ser Lys Leu His Cys Pro Ala Ala Pro Glu His Thr
 85 90 95
 Asp Pro Ser Glu Pro Arg Gly Ser Val Ser Cys Cys Ser Leu Leu Arg
 100 105 110
 Gly Leu Ser Ser Gly Trp Ser Ser Pro Leu Leu Pro Ala Pro Val Cys
 115 120 125
 Asn Pro Asn Lys Ala Ile Phe Thr Val Asp Ala Lys Thr Thr Glu Ile
 130 135 140
 Leu Val Ala Asn Asp Lys Ala Cys Gly Leu Leu Gly Tyr Ser Ser Gln
 145 150 155 160
 Asp Leu Ile Gly Gln Lys Leu Thr Gln Phe Phe Leu Arg Ser Asp Ser
 165 170 175
 Asp Val Val Glu Ala Leu Ser Glu Glu His Met Glu Ala Asp Gly His
 180 185 190
 Ala Ala Val Val Phe Gly Thr Val Val Asp Ile Ile Ser Arg Ser Gly
 195 200 205
 Glu Lys Ile Pro Val Ser Val Trp Met Lys Arg Met Arg Gln Glu Arg
 210 215 220
 Arg Leu Cys Cys Val Val Val Leu Glu Pro Val Glu Arg Val Ser Thr
 225 230 235 240
 Trp Val Ala Phe Gln Ser Asp Gly Thr Val Thr Ser Cys Asp Ser Leu
 245 250 255
 Phe Ala His Leu His Gly Tyr Val Ser Gly Glu Asp Val Ala Gly Gln
 260 265 270
 His Ile Thr Asp Leu Ile Pro Ser Val Gln Leu Pro Pro Ser Gly Gln
 275 280 285
 His Ile Pro Lys Asn Leu Lys Ile Gln Arg Ser Val Gly Arg Ala Arg
 290 295 300
 Asp Gly Thr Thr Phe Pro Leu Ser Leu Lys Leu Lys Ser Gln Pro Ser
 305 310 315 320
 Ser Glu Glu Ala Thr Thr Gly Glu Ala Ala Pro Val Ser Gly Tyr Arg
 325 330 335
 Ala Ser Val Trp Val Phe Cys Thr Ile Ser Gly Leu Ile Thr Leu Leu
 340 345 350
 Pro Asp Gly Thr Ile His Gly Ile Asn His Ser Phe Ala Leu Thr Leu
 355 360 365
 Phe Gly Tyr Gly Lys Thr Glu Leu Leu Gly Lys Asn Ile Thr Phe Leu
 370 375 380

Ile	Pro	Gly	Phe	Tyr	Ser	Tyr	Met	Asp	Leu	Ala	Tyr	Asn	Ser	Ser	Leu
385					390					395					400
Gln	Leu	Pro	Asp	Leu	Ala	Ser	Cys	Leu	Asp	Val	Gly	Asn	Glu	Ser	Gly
			405						410					415	
Cys	Gly	Glu	Arg	Thr	Leu	Asp	Pro	Trp	Gln	Gly	Gln	Asp	Pro	Ala	Glu
			420					425					430		
Gly	Gly	Gln	Asp	Pro	Arg	Ile	Asn	Val	Val	Leu	Ala	Gly	Gly	His	Val
		435					440					445			
Val	Pro	Arg	Asp	Glu	Ile	Arg	Lys	Leu	Met	Glu	Ser	Gln	Asp	Ile	Phe
	450					455					460				
Thr	Gly	Thr	Gln	Thr	Glu	Leu	Ile	Ala	Gly	Gly	Gln	Leu	Leu	Ser	Cys
465					470					475					480
Leu	Ser	Pro	Gln	Pro	Ala	Pro	Gly	Val	Asp	Asn	Val	Pro	Glu	Gly	Ser
			485						490					495	
Leu	Pro	Val	His	Gly	Glu	Gln	Ala	Leu	Pro	Lys	Asp	Gln	Gln	Ile	Thr
			500					505					510		
Ala	Leu	Gly	Arg	Glu	Glu	Pro	Val	Ala	Ile	Glu	Ser	Pro	Gly	Gln	Asp
		515					520					525			
Leu	Leu	Gly	Glu	Ser	Arg	Ser	Glu	Pro	Val	Asp	Val	Lys	Pro	Phe	Ala
	530					535					540				
Ser	Cys	Glu	Asp	Ser	Glu	Ala	Pro	Val	Pro	Ala	Glu	Asp	Gly	Gly	Ser
545					550					555					560
Asp	Ala	Gly	Met	Cys	Gly	Leu	Cys	Gln	Lys	Ala	Gln	Leu	Glu	Arg	Met
			565						570					575	
Gly	Val	Ser	Gly	Pro	Ser	Gly	Ser	Asp	Leu	Trp	Ala	Gly	Ala	Ala	Val
			580					585					590		
Ala	Lys	Pro	Gln	Ala	Lys	Gly	Gln	Leu	Ala	Gly	Gly	Ser	Leu	Leu	Met
		595					600					605			
His	Cys	Pro	Cys	Tyr	Gly	Ser	Glu	Trp	Gly	Leu	Trp	Trp	Arg	Ser	Gln
	610					615					620				
Asp	Leu	Ala	Pro	Ser	Pro	Ser	Gly	Met	Ala	Gly	Leu	Ser	Phe	Gly	Thr
625					630					635					640
Pro	Thr	Leu	Asp	Glu	Pro	Trp	Leu	Gly	Val	Glu	Asn	Asp	Arg	Glu	Glu
			645						650					655	
Leu	Gln	Thr	Cys	Leu	Ile	Lys	Glu	Gln	Leu	Ser	Gln	Leu	Ser	Leu	Ala
			660					665					670		
Gly	Ala	Leu	Asp	Val	Pro	His	Ala	Glu	Leu	Val	Pro	Thr	Glu	Cys	Gln
		675					680					685			
Ala	Val	Thr	Ala	Pro	Val	Ser	Ser	Cys	Asp	Leu	Gly	Gly	Arg	Asp	Leu
	690					695					700				
Cys	Gly	Gly	Cys	Thr	Gly	Ser	Ser	Ser	Ala	Cys	Tyr	Ala	Leu	Ala	Thr
705					710					715					720
Asp	Leu	Pro	Gly	Gly	Leu	Glu	Ala	Val	Glu	Ala	Gln	Glu	Val	Asp	Val
			725						730					735	
Asn	Ser	Phe	Ser	Trp	Asn	Leu	Lys	Glu	Leu	Phe	Phe	Ser	Asp	Gln	Thr
			740					745					750		
Asp	Gln	Thr	Ser	Ser	Asn	Cys	Ser	Cys	Ala	Thr	Ser	Glu	Leu	Arg	Glu
		755				760						765			
Thr	Pro	Ser	Ser	Leu	Ala	Val	Gly	Ser	Asp	Pro	Asp	Val	Gly	Ser	Leu
	770					775						780			
Gln	Glu	Gln	Gly	Ser	Cys	Val	Leu	Asp	Asp	Arg	Glu	Leu	Leu	Leu	Leu
785					790					795					800
Thr	Gly	Thr	Cys	Val	Asp	Leu	Gly	Gln	Gly	Arg	Arg	Phe	Arg	Glu	Ser
			805						810					815	
Cys	Val	Gly	His	Asp	Pro	Thr	Glu	Pro	Leu	Glu	Val	Cys	Leu	Val	Ser
			820					825					830		
Ser	Glu	His	Tyr	Ala	Ala	Ser	Asp	Arg	Glu	Ser	Pro	Gly	His	Val	Pro
		835					840					845			
Ser	Thr	Leu	Asp	Ala	Gly	Pro	Glu	Asp	Thr	Cys	Pro	Ser	Ala	Glu	Glu
	850					855					860				
Pro	Arg	Leu	Asn	Val	Gln	Val	Thr	Ser	Thr	Pro	Val	Ile	Val	Met	Arg
865					870					875					880
Gly	Ala	Ala	Gly	Leu	Gln	Arg	Glu	Ile	Gln	Glu	Gly	Ala	Tyr	Ser	Gly
			885						890					895	

Ser Cys Tyr His Arg Asp Gly Leu Arg Leu Ser Ile Gln Phe Glu Val
 900 905 910
 Arg Arg Val Glu Leu Gln Gly Pro Thr Pro Leu Phe Cys Cys Trp Leu
 915 920 925
 Val Lys Asp Leu Leu His Ser Gln Arg Asp Ser Ala Ala Arg Thr Arg
 930 935 940
 Leu Phe Leu Ala Ser Leu Pro Gly Ser Thr His Ser Thr Ala Ala Glu
 945 950 955 960
 Leu Thr Gly Pro Ser Leu Val Glu Val Leu Arg Ala Arg Pro Trp Phe
 965 970 975
 Glu Glu Pro Pro Lys Ala Val Glu Leu Glu Gly Leu Ala Ala Cys Glu
 980 985 990
 Gly Glu Tyr Ser Gln Lys Tyr Ser Thr Met Ser Pro Leu Gly Ser Gly
 995 1000 1005
 Ala Phe Gly Phe Val Trp Thr Ala Val Asp Lys Glu Lys Asn Lys Glu
 1010 1015 1020
 Val Val Val Lys Phe Ile Lys Lys Glu Lys Val Leu Glu Asp Cys Trp
 1025 1030 1035 1040
 Ile Glu Asp Pro Lys Leu Gly Lys Val Thr Leu Glu Ile Ala Ile Leu
 1045 1050 1055
 Ser Arg Val Glu His Ala Asn Ile Ile Lys Val Leu Asp Ile Phe Glu
 1060 1065 1070
 Asn Gln Gly Phe Phe Gln Leu Val Met Glu Lys His Gly Ser Gly Leu
 1075 1080 1085
 Asp Leu Phe Ala Phe Ile Asp Arg His Pro Arg Leu Asp Glu Pro Leu
 1090 1095 1100
 Ala Ser Tyr Ile Phe Arg Gln Leu Val Ser Ala Val Gly Tyr Leu Arg
 1105 1110 1115 1120
 Leu Lys Asp Ile Ile His Arg Asp Ile Lys Asp Glu Asn Ile Val Ile
 1125 1130 1135
 Ala Glu Asp Phe Thr Ile Lys Leu Ile Asp Phe Gly Ser Ala Ala Tyr
 1140 1145 1150
 Leu Glu Arg Gly Lys Leu Phe Tyr Thr Phe Cys Gly Thr Ile Glu Tyr
 1155 1160 1165
 Cys Ala Pro Glu Val Leu Met Gly Asn Pro Tyr Arg Gly Pro Glu Leu
 1170 1175 1180
 Glu Met Trp Ser Leu Gly Val Thr Leu Tyr Thr Leu Val Phe Glu Glu
 1185 1190 1195 1200
 Asn Pro Phe Cys Glu Leu Glu Glu Thr Val Glu Ala Ala Ile His Pro
 1205 1210 1215
 Pro Tyr Leu Val Ser Lys Glu Leu Met Ser Leu Val Ser Gly Leu Leu
 1220 1225 1230
 Gln Pro Val Pro Glu Arg Arg Thr Thr Leu Glu Lys Leu Val Thr Asp
 1235 1240 1245
 Pro Trp Val Thr Gln Pro Val Asn Leu Ala Asp Tyr Thr Trp Glu Glu
 1250 1255 1260
 Val Phe Arg Val Asn Lys Pro Glu Ser Gly Val Leu Ser Ala Ala Ser
 1265 1270 1275 1280
 Leu Glu Met Gly Asn Arg Ser Leu Ser Asp Val Ala Gln Ala Gln Glu
 1285 1290 1295
 Leu Cys Gly Gly Pro Val Pro Gly Glu Ala Pro Asn Gly Gln Gly Cys
 1300 1305 1310
 Leu His Pro Gly Asp Pro Arg Leu Leu Thr Ser *
 1315 1320 1323

<210> 1894

<211> 556

<212> PRT

<213> Homo sapiens

<400> 1894

Met	Asp	Arg	Ser	Lys	Arg	Asn	Ser	Ile	Ala	Gly	Phe	Pro	Pro	Arg	Val	1	5	10	15
Glu	Arg	Leu	Glu	Glu	Phe	Glu	Gly	Gly	Gly	Gly	Gly	Glu	Gly	Asn	Val	20	25	30	
Ser	Gln	Val	Gly	Arg	Val	Trp	Pro	Ser	Ser	Tyr	Arg	Ala	Leu	Ile	Ser	35	40	45	
Ala	Phe	Ser	Arg	Leu	Thr	Arg	Leu	Asp	Asp	Phe	Thr	Cys	Glu	Lys	Ile	50	55	60	
Gly	Ser	Gly	Phe	Phe	Ser	Glu	Val	Phe	Lys	Val	Arg	His	Arg	Ala	Ser	65	70	75	80
Gly	Gln	Val	Met	Ala	Leu	Lys	Met	Asn	Thr	Leu	Ser	Ser	Asn	Arg	Ala	85	90	95	
Asn	Met	Leu	Lys	Glu	Val	Gln	Leu	Met	Asn	Arg	Leu	Ser	His	Pro	Asn	100	105	110	
Ile	Leu	Arg	Tyr	Ile	Asn	Ser	Gly	Asn	Leu	Glu	Gln	Leu	Leu	Asp	Ser	115	120	125	
Asn	Leu	His	Leu	Pro	Trp	Thr	Val	Arg	Val	Lys	Leu	Ala	Tyr	Asp	Ile	130	135	140	
Ala	Val	Gly	Leu	Ser	Tyr	Leu	His	Phe	Lys	Gly	Ile	Phe	His	Arg	Asp	145	150	155	160
Leu	Thr	Ser	Lys	Asn	Cys	Leu	Ile	Lys	Arg	Asp	Glu	Asn	Gly	Tyr	Ser	165	170	175	
Ala	Val	Val	Ala	Asp	Phe	Gly	Leu	Ala	Glu	Lys	Ile	Pro	Asp	Val	Ser	180	185	190	
Met	Gly	Ser	Glu	Lys	Leu	Ala	Val	Val	Gly	Ser	Pro	Phe	Trp	Met	Ala	195	200	205	
Pro	Glu	Val	Leu	Arg	Asp	Glu	Pro	Tyr	Asn	Glu	Lys	Ala	Asp	Val	Phe	210	215	220	
Ser	Tyr	Gly	Ile	Ile	Leu	Cys	Glu	Ile	Ile	Ala	Arg	Ile	Gln	Ala	Asp	225	230	235	240
Pro	Asp	Tyr	Leu	Pro	Arg	Thr	Glu	Asn	Phe	Gly	Leu	Asp	Tyr	Asp	Ala	245	250	255	
Phe	Gln	His	Met	Val	Gly	Asp	Cys	Pro	Pro	Asp	Phe	Leu	Gln	Leu	Thr	260	265	270	
Phe	Asn	Cys	Cys	Asn	Met	Asp	Pro	Lys	Leu	Arg	Pro	Ser	Phe	Val	Glu	275	280	285	
Ile	Gly	Lys	Thr	Leu	Glu	Glu	Ile	Leu	Ser	Arg	Leu	Gln	Glu	Glu	Glu	290	295	300	
Gln	Glu	Arg	Asp	Arg	Lys	Leu	Gln	Pro	Thr	Ala	Arg	Gly	Leu	Leu	Glu	305	310	315	320
Lys	Ala	Pro	Gly	Val	Lys	Arg	Leu	Ser	Ser	Leu	Asp	Asp	Lys	Ile	Pro	325	330	335	
His	Lys	Ser	Pro	Cys	Pro	Arg	Arg	Thr	Ile	Trp	Leu	Ser	Arg	Ser	Gln	340	345	350	
Ser	Asp	Ile	Phe	Ser	Arg	Lys	Pro	Pro	Arg	Thr	Val	Ser	Val	Leu	Asp	355	360	365	
Pro	Tyr	Tyr	Arg	Pro	Arg	Asp	Gly	Ala	Ala	Arg	Thr	Pro	Lys	Val	Asn	370	375	380	
Pro	Phe	Ser	Ala	Arg	Gln	Asp	Leu	Met	Gly	Gly	Lys	Ile	Lys	Phe	Phe	385	390	395	400
Asp	Leu	Pro	Ser	Lys	Ser	Val	Ile	Ser	Leu	Val	Phe	Asp	Leu	Asp	Ala	405	410	415	
Pro	Gly	Pro	Gly	Thr	Met	Pro	Leu	Ala	Asp	Trp	Gln	Glu	Pro	Leu	Ala	420	425	430	
Pro	Pro	Ile	Arg	Arg	Trp	Arg	Ser	Leu	Pro	Gly	Ser	Pro	Glu	Phe	Leu	435	440	445	
His	Gln	Glu	Ala	Cys	Pro	Phe	Val	Gly	Arg	Glu	Glu	Ser	Leu	Ser	Asp	450	455	460	
Gly	Pro	Pro	Pro	Arg	Leu	Ser	Ser	Leu	Lys	Tyr	Arg	Val	Lys	Glu	Ile	465	470	475	480
Pro	Pro	Phe	Arg	Ala	Ser	Ala	Leu	Pro	Ala	Ala	Gln	Ala	His	Glu	Ala	485	490	495	
Met	Asp	Cys	Ser	Ile	Leu	Gln	Glu	Glu	Asn	Gly	Phe	Gly	Ser	Arg	Pro	500	505	510	

Gln Gly Thr Ser Pro Cys Pro Ala Gly Ala Ser Glu Glu Met Glu Val
 515 520 525
 Glu Glu Arg Pro Ala Gly Ser Thr Pro Ala Thr Phe Ser Thr Ser Gly
 530 535 540
 Ile Gly Leu Gln Thr Gln Gly Lys Gln Asp Gly *
 545 550 555

<210> 1895

<211> 528

<212> PRT

<213> Homo sapiens

<400> 1895

Met Asp Arg Ser Lys Arg Asn Ser Ile Ala Gly Phe Pro Pro Arg Val
 1 5 10 15
 Glu Arg Leu Glu Glu Phe Glu Gly Gly Gly Gly Glu Gly Asn Val
 20 25 30
 Ser Gln Val Gly Arg Val Trp Pro Ser Ser Tyr Arg Ala Leu Ile Ser
 35 40 45
 Ala Phe Ser Arg Leu Thr Arg Leu Asp Asp Phe Thr Cys Glu Lys Ile
 50 55 60
 Gly Ser Gly Phe Phe Ser Glu Val Phe Lys Val Arg His Arg Ala Ser
 65 70 75 80
 Gly Gln Val Met Ala Leu Lys Met Asn Thr Leu Ser Ser Asn Arg Ala
 85 90 95
 Asn Met Leu Lys Glu Val Gln Leu Met Asn Arg Leu Ser His Pro Asn
 100 105 110
 Ile Leu Arg Tyr Ile Asn Ser Gly Asn Leu Glu Gln Leu Leu Asp Ser
 115 120 125
 Asn Leu His Leu Pro Trp Thr Val Arg Val Lys Leu Ala Tyr Asp Ile
 130 135 140
 Ala Val Gly Leu Ser Tyr Leu His Phe Lys Gly Ile Phe His Arg Asp
 145 150 155 160
 Leu Thr Ser Lys Asn Cys Leu Ile Lys Arg Asp Glu Asn Gly Tyr Ser
 165 170 175
 Ala Val Val Ala Asp Phe Gly Leu Ala Glu Lys Ile Pro Asp Val Ser
 180 185 190
 Met Gly Ser Glu Lys Leu Ala Val Val Gly Ser Pro Phe Trp Met Ala
 195 200 205
 Pro Glu Val Leu Arg Asp Glu Pro Tyr Asn Glu Lys Asn Phe Gly Leu
 210 215 220
 Asp Tyr Asp Ala Phe Gln His Met Val Gly Asp Cys Pro Pro Asp Phe
 225 230 235 240
 Leu Gln Leu Thr Phe Asn Cys Cys Asn Met Asp Pro Lys Leu Arg Pro
 245 250 255
 Ser Phe Val Glu Ile Gly Lys Thr Leu Glu Glu Ile Leu Ser Arg Leu
 260 265 270
 Gln Glu Glu Glu Gln Glu Arg Asp Arg Lys Leu Gln Pro Thr Ala Arg
 275 280 285
 Gly Leu Leu Glu Lys Ala Pro Gly Val Lys Arg Leu Ser Ser Leu Asp
 290 295 300
 Asp Lys Ile Pro His Lys Ser Pro Cys Pro Arg Arg Thr Ile Trp Leu
 305 310 315 320
 Ser Arg Ser Gln Ser Asp Ile Phe Ser Arg Lys Pro Pro Arg Thr Val
 325 330 335
 Ser Val Leu Asp Pro Tyr Tyr Arg Pro Arg Asp Gly Ala Ala Arg Thr
 340 345 350
 Pro Lys Val Asn Pro Phe Ser Ala Arg Gln Asp Leu Met Gly Gly Lys
 355 360 365
 Ile Lys Phe Phe Asp Leu Pro Ser Lys Ser Val Ile Ser Leu Val Phe
 370 375 380

Asp Leu Asp Ala Pro Gly Pro Gly Thr Met Pro Leu Ala Asp Trp Gln
 385 390 395 400
 Glu Pro Leu Ala Pro Pro Ile Arg Arg Trp Arg Ser Leu Pro Gly Ser
 405 410 415
 Pro Glu Phe Leu His Gln Glu Ala Cys Pro Phe Val Gly Arg Glu Glu
 420 425 430
 Ser Leu Ser Asp Gly Pro Pro Pro Arg Leu Ser Ser Leu Lys Tyr Arg
 435 440 445
 Val Lys Glu Ile Pro Pro Phe Arg Ala Ser Ala Leu Pro Ala Ala Gln
 450 455 460
 Ala His Glu Ala Met Asp Cys Ser Ile Leu Gln Glu Glu Asn Gly Phe
 465 470 475 480
 Gly Ser Arg Pro Gln Gly Thr Ser Pro Cys Pro Ala Gly Ala Ser Glu
 485 490 495
 Glu Met Glu Val Glu Glu Arg Pro Ala Gly Ser Thr Pro Ala Thr Phe
 500 505 510
 Ser Thr Ser Gly Ile Gly Leu Gln Thr Gln Gly Lys Gln Asp Gly *
 515 520 525 527

<210> 1896

<211> 301

<212> PRT

<213> Homo sapiens

<400> 1896

Met Asp Ser Asp Ser Cys Ala Ala Ala Phe His Pro Glu Glu Tyr Ser
 1 5 10 15
 Pro Ser Cys Lys Arg Arg Arg Thr Val Glu Asp Phe Asn Lys Phe Cys
 20 25 30
 Thr Phe Val Leu Ala Tyr Ala Gly Tyr Ile Pro Tyr Pro Lys Glu Glu
 35 40 45
 Leu Pro Leu Arg Ser Ser Pro Ser Pro Ala Asn Ser Thr Ala Gly Thr
 50 55 60
 Ile Asp Ser Asp Gly Trp Asp Ala Gly Phe Ser Asp Ile Ala Ser Ser
 65 70 75 80
 Val Pro Leu Pro Val Ser Asp Arg Cys Phe Ser His Leu Gln Pro Thr
 85 90 95
 Leu Leu Gln Arg Ala Lys Pro Ser Asn Phe Leu Leu Asp Arg Lys Lys
 100 105 110
 Thr Asp Lys Leu Lys Lys Lys Lys Arg Lys Arg Arg Asp Ser Asp
 115 120 125
 Ala Pro Gly Lys Glu Gly Tyr Arg Gly Gly Leu Leu Lys Leu Glu Ala
 130 135 140
 Ala Asp Pro Tyr Val Glu Thr Pro Thr Ser Pro Thr Leu Gln Asp Ile
 145 150 155 160
 Pro Gln Ala Pro Ser Asp Pro Cys Ser Gly Trp Asp Ser Asp Thr Pro
 165 170 175
 Ser Ser Gly Ser Cys Ala Thr Val Ser Pro Asp Gln Val Lys Lys Lys
 180 185 190
 Lys Thr Glu Gly Lys Arg Thr Ile Val Arg Gln Gly Lys Gln Val Val
 195 200 205
 Phe Arg Asp Glu Asp Ser Thr Gly Asn Asp Glu Asp Ile Met Val Asp
 210 215 220
 Ser Asp Asp Asp Ser Trp Asp Leu Val Thr Cys Phe Cys Met Lys Pro
 225 230 235 240
 Phe Ala Gly Arg Pro Met Ile Glu Cys Asn Glu Cys His Thr Trp Ile
 245 250 255
 His Leu Ser Cys Ala Lys Ile Arg Lys Ser Asn Val Pro Glu Val Phe
 260 265 270
 Val Cys Gln Lys Cys Arg Asp Ser Lys Phe Asp Ile Arg Arg Ser Asn
 275 280 285

Arg Ser Arg Thr Gly Ser Arg Lys Leu Phe Leu Asp *
 290 295 300

<210> 1897
 <211> 648
 <212> PRT
 <213> Homo sapiens

<400> 1897
 Met Pro Val Ser Leu Glu Asp Ser Gly Glu Pro Thr Ser Cys Pro Ala
 1 5 10 15
 Thr Asp Ala Glu Thr Ala Ser Glu Gly Ser Val Glu Ser Ala Ser Glu
 20 25 30
 Thr Arg Ser Gly Pro Gln Ser Ala Ser Thr Ala Val Lys Glu Arg Pro
 35 40 45
 Ala Ser Ser Glu Lys Val Lys Gly Gly Asp Asp His Asp Asp Thr Ser
 50 55 60
 Asp Ser Asp Ser Asp Gly Leu Thr Leu Lys Glu Leu Gln Asn Arg Leu
 65 70 75 80
 Arg Arg Lys Arg Glu Gln Glu Pro Thr Glu Arg Pro Leu Lys Gly Ile
 85 90 95
 Gln Ser Arg Leu Arg Lys Lys Arg Arg Glu Glu Gly Pro Ala Glu Thr
 100 105 110
 Val Gly Ser Glu Ala Ser Asp Thr Val Glu Gly Val Leu Pro Ser Lys
 115 120 125
 Gln Glu Pro Glu Asn Asp Gln Gly Val Val Ser Gln Ala Gly Lys Asp
 130 135 140
 Asp Arg Glu Ser Lys Leu Glu Gly Lys Ala Ala Gln Asp Ile Lys Asp
 145 150 155 160
 Glu Glu Pro Gly Asp Leu Gly Arg Pro Lys Pro Glu Cys Glu Gly Tyr
 165 170 175
 Asp Pro Asn Ala Leu Tyr Cys Ile Cys Arg Gln Pro His Asn Asn Arg
 180 185 190
 Phe Met Ile Cys Cys Asp Arg Cys Glu Glu Trp Phe His Gly Asp Cys
 195 200 205
 Val Gly Ile Ser Glu Ala Arg Gly Arg Leu Leu Glu Arg Asn Gly Glu
 210 215 220
 Asp Tyr Ile Cys Pro Asn Cys Thr Ile Leu Gln Val Gln Asp Glu Thr
 225 230 235 240
 His Ser Glu Thr Ala Asp Gln Gln Glu Ala Lys Trp Arg Pro Gly Asp
 245 250 255
 Ala Asp Gly Thr Asp Cys Thr Ser Ile Gly Thr Ile Glu Gln Lys Ser
 260 265 270
 Ser Glu Asp Gln Gly Ile Lys Gly Arg Ile Glu Lys Ala Ala Asn Pro
 275 280 285
 Ser Gly Lys Lys Lys Leu Lys Ile Phe Gln Pro Gly Pro Gly Pro Val
 290 295 300
 Pro Thr Gln Leu Pro Val Leu Trp Gln Val Leu Glu Ile Ala Val Ser
 305 310 315 320
 Arg Ser Ile Ser Ala Phe Thr Leu Leu His Cys Ile Ser Cys Lys Val
 325 330 335
 Ile Glu Ala Pro Gly Ala Ser Lys Cys Ile Gly Pro Gly Cys Cys His
 340 345 350
 Val Ala Gln Pro Asp Ser Val Tyr Cys Ser Asn Asp Cys Ile Leu Lys
 355 360 365
 His Ala Ala Ala Thr Met Lys Phe Leu Ser Ser Gly Lys Glu Gln Lys
 370 375 380
 Pro Lys Pro Lys Glu Lys Met Lys Met Lys Pro Glu Lys Pro Ser Leu
 385 390 395 400
 Pro Lys Cys Gly Ala Gln Ala Gly Ile Lys Ile Ser Ser Val His Lys
 405 410 415


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Arg Pro Ala Pro Glu Lys Lys Glu Thr Thr Val Lys Lys Ala Val Val
      420      425      430
Val Pro Ala Arg Ser Glu Ala Leu Gly Lys Glu Ala Ala Cys Glu Ser
      435      440      445
Ser Thr Pro Ser Trp Ala Ser Asp His Asn Tyr Asn Ala Val Lys Pro
      450      455      460
Glu Lys Thr Ala Ala Pro Ser Pro Ser Leu Leu Tyr Lys Ser Thr Lys
465      470      475      480
Glu Asp Arg Arg Ser Glu Glu Lys Ala Ala Ala Thr Ala Ala Ser Lys
      485      490      495
Lys Thr Ala Pro Pro Gly Ser Thr Val Gly Lys Gln Pro Ala Pro Arg
      500      505      510
Asn Leu Val Pro Lys Lys Ser Ser Phe Ala Asn Val Ala Ala Ala Thr
      515      520      525
Pro Ala Ile Lys Lys Pro Pro Ser Gly Phe Lys Gly Thr Ile Pro Lys
      530      535      540
Arg Pro Trp Leu Ser Ala Thr Pro Ser Ser Gly Ala Ser Ala Ala Arg
545      550      555      560
Gln Ala Gly Pro Ala Pro Ala Ala Thr Ala Ala Ser Lys Lys Phe
      565      570      575
Pro Gly Ser Ala Ala Leu Val Gly Ala Val Arg Lys Pro Val Val Pro
      580      585      590
Ser Val Pro Met Ala Ser Pro Ala Pro Gly Arg Leu Gly Ala Met Ser
      595      600      605
Ala Ala Pro Ser Gln Pro Asn Ser Gln Ile Arg Gln Asn Ile Arg Arg
      610      615      620
Ser Leu Lys Glu Ile Leu Trp Lys Ser Ser Phe Phe Leu Phe Cys Ser
625      630      635      640
Glu Ser Met Thr Ala Met Thr *
      645      647

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<210> 1898

<211> 1016

<212> PRT

<213> Homo sapiens

<400> 1898

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Met Arg Arg Phe Leu Arg Pro Gly His Asp Pro Val Arg Glu Arg Leu
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Lys Arg Asp Leu Phe Gln Phe Asn Lys Thr Val Glu His Gly Phe Pro
      20      25      30
His Gln Pro Ser Ala Leu Gly Tyr Ser Pro Ser Leu Arg Ile Leu Ala
      35      40      45
Ile Gly Thr Arg Ser Gly Ala Ile Lys Leu Tyr Gly Ala Pro Gly Val
      50      55      60
Glu Phe Met Gly Leu His Gln Glu Asn Asn Ala Val Thr Gln Ile His
      65      70      75      80
Leu Leu Pro Gly Gln Cys Gln Leu Val Thr Leu Leu Asp Asp Asn Ser
      85      90      95
Leu His Leu Trp Ser Leu Lys Val Lys Gly Gly Ala Ser Glu Leu Gln
      100      105      110
Glu Asp Glu Ser Phe Thr Leu Arg Gly Pro Pro Gly Ala Ala Pro Ser
      115      120      125
Ala Thr Gln Ile Thr Val Val Leu Pro His Ser Ser Cys Glu Leu Leu
      130      135      140
Tyr Leu Gly Thr Glu Ser Gly Asn Val Phe Val Val Gln Leu Pro Ala
145      150      155      160
Phe Arg Ala Leu Glu Asp Arg Thr Ile Ser Ser Asp Ala Val Leu Gln
      165      170      175
Arg Leu Pro Glu Glu Ala Arg His Arg Arg Val Phe Glu Met Val Glu
      180      185      190

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Ala	Leu	Gln	Glu	His	Pro	Arg	Asp	Pro	Asn	Gln	Ile	Leu	Ile	Gly	Tyr
	195						200					205			
Ser	Arg	Gly	Leu	Val	Val	Ile	Trp	Asp	Leu	Gln	Gly	Ser	Arg	Val	Leu
	210					215					220				
Tyr	His	Phe	Leu	Ser	Ser	Gln	Gln	Leu	Glu	Asn	Ile	Trp	Trp	Gln	Arg
225					230					235					240
Asp	Gly	Arg	Leu	Leu	Val	Ser	Cys	His	Ser	Asp	Gly	Ser	Tyr	Cys	Gln
				245					250					255	
Trp	Pro	Val	Ser	Ser	Glu	Ala	Gln	Gln	Pro	Glu	Pro	Leu	Arg	Ser	Leu
			260					265					270		
Val	Pro	Tyr	Gly	Pro	Phe	Pro	Cys	Lys	Ala	Ile	Thr	Arg	Ile	Leu	Trp
	275						280					285			
Leu	Thr	Thr	Arg	Gln	Gly	Leu	Pro	Phe	Thr	Ile	Phe	Gln	Gly	Gly	Met
290						295					300				
Pro	Arg	Ala	Ser	Tyr	Gly	Asp	Arg	His	Cys	Ile	Ser	Val	Ile	His	Asp
305					310					315					320
Gly	Gln	Gln	Thr	Ala	Phe	Asp	Phe	Thr	Ser	Arg	Val	Ile	Gly	Phe	Thr
				325					330					335	
Val	Leu	Thr	Glu	Ala	Asp	Pro	Ala	Ala	Thr	Phe	Asp	Asp	Pro	Tyr	Ala
			340					345					350		
Leu	Val	Val	Leu	Ala	Glu	Glu	Glu	Leu	Val	Val	Ile	Asp	Leu	Gln	Thr
	355						360					365			
Ala	Gly	Trp	Pro	Pro	Val	Gln	Leu	Pro	Tyr	Leu	Ala	Ser	Leu	His	Cys
	370					375					380				
Ser	Ala	Ile	Thr	Cys	Ser	His	His	Val	Ser	Asn	Ile	Pro	Leu	Lys	Leu
385					390					395					400
Trp	Glu	Arg	Ile	Ile	Ala	Ala	Gly	Ser	Arg	Gln	Asn	Ala	His	Phe	Ser
				405					410					415	
Thr	Met	Glu	Trp	Pro	Ile	Asp	Gly	Gly	Thr	Ser	Leu	Thr	Pro	Ala	Pro
			420					425					430		
Pro	Gln	Arg	Asp	Leu	Leu	Leu	Thr	Gly	His	Glu	Asp	Gly	Thr	Val	Arg
	435						440					445			
Phe	Trp	Asp	Ala	Ser	Gly	Val	Cys	Leu	Arg	Leu	Leu	Tyr	Lys	Leu	Ser
	450				455					460					
Thr	Val	Arg	Val	Phe	Leu	Thr	Asp	Thr	Asp	Pro	Asn	Glu	Asn	Phe	Ser
465					470					475					480
Ala	Gln	Gly	Glu	Asp	Glu	Trp	Pro	Pro	Leu	Arg	Lys	Val	Gly	Ser	Phe
				485					490					495	
Asp	Pro	Tyr	Ser	Asp	Asp	Pro	Arg	Leu	Gly	Ile	Gln	Lys	Ile	Phe	Leu
		500						505					510		
Cys	Lys	Tyr	Ser	Gly	Tyr	Leu	Ala	Val	Ala	Gly	Thr	Ala	Gly	Gln	Val
	515					520						525			
Leu	Val	Leu	Glu	Leu	Asn	Asp	Glu	Ala	Ala	Glu	Gln	Ala	Val	Glu	Gln
	530					535					540				
Val	Glu	Ala	Asp	Leu	Leu	Gln	Asp	Gln	Glu	Gly	Tyr	Arg	Trp	Lys	Gly
545					550					555					560
His	Glu	Arg	Leu	Ala	Ala	Arg	Ser	Gly	Pro	Val	Arg	Phe	Glu	Pro	Gly
				565					570					575	
Phe	Gln	Pro	Phe	Val	Leu	Val	Gln	Cys	Gln	Pro	Pro	Ala	Val	Val	Thr
		580						585					590		
Ser	Leu	Ala	Leu	His	Ser	Glu	Trp	Arg	Leu	Val	Ala	Phe	Gly	Thr	Ser
	595					600						605			
His	Gly	Phe	Gly	Leu	Phe	Asp	His	Gln	Gln	Arg	Arg	Gln	Val	Phe	Val
	610					615					620				
Lys	Cys	Thr	Leu	His	Pro	Ser	Asp	Gln	Leu	Ala	Leu	Glu	Gly	Pro	Leu
625					630					635					640
Ser	Arg	Val	Lys	Ser	Leu	Lys	Lys	Ser	Leu	Arg	Gln	Ser	Phe	Arg	Arg
				645					650					655	
Met	Arg	Arg	Ser	Arg	Val	Ser	Ser	Arg	Lys	Arg	His	Pro	Ala	Gly	Pro
			660					665					670		
Pro	Gly	Glu	Ala	Gln	Glu	Gly	Ser	Ala	Lys	Ala	Glu	Arg	Pro	Gly	Leu
	675					680						685			
Gln	Asn	Met	Glu	Leu	Ala	Pro	Val	Gln	Arg	Lys	Ile	Glu	Ala	Arg	Ser
	690					695						700			

Ala Glu Asp Ser Phe Thr Gly Phe Val Arg Thr Leu Tyr Phe Ala Asp
 705 710 715 720
 Thr Tyr Leu Lys Asp Ser Ser Arg His Cys Pro Ser Leu Trp Ala Gly
 725 730 735
 Thr Asn Gly Gly Thr Ile Tyr Ala Phe Ser Leu Arg Val Pro Pro Ala
 740 745 750
 Glu Arg Arg Met Asp Glu Pro Val Arg Ala Glu Gln Ala Lys Glu Ile
 755 760 765
 Gln Leu Met His Arg Ala Pro Val Val Gly Ile Leu Val Leu Asp Gly
 770 775 780
 His Ser Val Pro Leu Pro Glu Pro Leu Glu Val Ala His Asp Leu Ser
 785 790 795 800
 Lys Ser Pro Asp Met Gln Gly Ser His Gln Leu Leu Val Val Ser Glu
 805 810 815
 Glu Gln Phe Lys Val Phe Thr Leu Pro Lys Val Ser Ala Lys Leu Lys
 820 825 830
 Leu Lys Leu Thr Ala Leu Glu Gly Ser Arg Val Arg Arg Val Ser Val
 835 840 845
 Ala His Phe Gly Ser Arg Arg Ala Glu Asp Tyr Gly Glu His His Leu
 850 855 860
 Ala Val Leu Thr Asn Leu Gly Asp Ile Gln Val Val Ser Leu Pro Leu
 865 870 875 880
 Leu Lys Pro Gln Val Arg Tyr Ser Cys Ile Arg Arg Glu Asp Val Ser
 885 890 895
 Gly Ile Ala Ser Cys Val Phe Thr Lys Tyr Gly Gln Gly Phe Tyr Leu
 900 905 910
 Ile Ser Pro Ser Glu Phe Glu Arg Phe Ser Leu Ser Thr Lys Trp Leu
 915 920 925
 Val Glu Pro Arg Cys Leu Val Asp Ser Ala Glu Thr Lys Asn His Arg
 930 935 940
 Pro Gly Asn Gly Ala Gly Pro Lys Lys Ala Pro Ser Arg Ala Arg Asn
 945 950 955 960
 Ser Gly Thr Gln Ser Asp Gly Glu Glu Lys Gln Pro Gly Leu Val Met
 965 970 975
 Glu Arg Ala Leu Leu Ser Asp Glu Arg Ala Ala Thr Gly Val His Ile
 980 985 990
 Glu Pro Pro Trp Gly Ala Ala Ser Ala Met Ala Glu Gln Ser Glu Trp
 995 1000 1005
 Leu Ser Val Gln Ala Ala Arg *
 1010 1015

<210> 1899

<211> 946

<212> PRT

<213> Homo sapiens

<400> 1899

Met Arg Arg Phe Leu Arg Pro Gly His Asp Pro Val Arg Glu Arg Leu
 1 5 10 15
 Lys Arg Asp Leu Phe Gln Phe Asn Lys Thr Val Glu His Gly Phe Pro
 20 25 30
 His Gln Pro Ser Ala Leu Gly Tyr Ser Pro Ser Leu Arg Ile Leu Ala
 35 40 45
 Ile Gly Thr Arg Ser Gly Ala Ile Lys Leu Tyr Gly Ala Pro Gly Val
 50 55 60
 Glu Phe Met Gly Leu His Gln Glu Asn Asn Ala Val Thr Gln Ile His
 65 70 75 80
 Leu Leu Pro Gly Gln Cys Gln Leu Val Thr Leu Leu Asp Asp Asn Ser
 85 90 95
 Leu His Leu Trp Ser Leu Lys Val Lys Gly Gly Ala Ser Glu Leu Gln
 100 105 110

Glu	Asp	Glu	Ser	Phe	Thr	Leu	Arg	Gly	Pro	Pro	Gly	Ala	Ala	Pro	Ser	115	120	125
Ala	Thr	Gln	Ile	Thr	Val	Val	Leu	Pro	His	Ser	Ser	Cys	Glu	Leu	Leu	130	135	140
Tyr	Leu	Gly	Thr	Glu	Ser	Gly	Asn	Val	Phe	Val	Val	Gln	Leu	Pro	Ala	145	150	155
Phe	Arg	Ala	Leu	Glu	Asp	Arg	Thr	Ile	Ser	Ser	Asp	Ala	Val	Leu	Gln	165	170	175
Arg	Leu	Pro	Glu	Glu	Ala	Arg	His	Arg	Arg	Val	Phe	Glu	Met	Val	Glu	180	185	190
Ala	Leu	Gln	Glu	His	Pro	Arg	Asp	Pro	Asn	Gln	Ile	Leu	Ile	Gly	Tyr	195	200	205
Ser	Arg	Gly	Leu	Val	Val	Ile	Trp	Asp	Leu	Gln	Gly	Ser	Arg	Val	Leu	210	215	220
Tyr	His	Phe	Leu	Ser	Ser	Gln	Gln	Leu	Glu	Asn	Ile	Trp	Trp	Gln	Arg	225	230	235
Asp	Gly	Arg	Leu	Leu	Val	Ser	Cys	His	Ser	Asp	Gly	Ser	Tyr	Cys	Gln	245	250	255
Trp	Pro	Val	Ser	Ser	Glu	Ala	Gln	Gln	Pro	Glu	Pro	Leu	Arg	Ser	Leu	260	265	270
Val	Pro	Tyr	Ala	Phe	Asp	Asp	Pro	Tyr	Ala	Leu	Val	Val	Leu	Ala	Glu	275	280	285
Glu	Glu	Leu	Val	Val	Ile	Asp	Leu	Gln	Thr	Ala	Gly	Trp	Pro	Pro	Val	290	295	300
Gln	Leu	Pro	Tyr	Leu	Ala	Ser	Leu	His	Cys	Ser	Ala	Ile	Thr	Cys	Ser	305	310	315
His	His	Val	Ser	Asn	Ile	Pro	Leu	Lys	Leu	Trp	Glu	Arg	Ile	Ile	Ala	325	330	335
Ala	Gly	Ser	Arg	Gln	Asn	Ala	His	Phe	Ser	Thr	Met	Glu	Trp	Pro	Ile	340	345	350
Asp	Gly	Gly	Thr	Ser	Leu	Thr	Pro	Ala	Pro	Pro	Gln	Arg	Asp	Leu	Leu	355	360	365
Leu	Thr	Gly	His	Glu	Asp	Gly	Thr	Val	Arg	Phe	Trp	Asp	Ala	Ser	Gly	370	375	380
Val	Cys	Leu	Arg	Leu	Leu	Tyr	Lys	Leu	Ser	Thr	Val	Arg	Val	Phe	Leu	385	390	395
Thr	Asp	Thr	Asp	Pro	Asn	Glu	Asn	Phe	Ser	Ala	Gln	Gly	Glu	Asp	Glu	405	410	415
Trp	Pro	Pro	Leu	Arg	Lys	Val	Gly	Ser	Phe	Asp	Pro	Tyr	Ser	Asp	Asp	420	425	430
Pro	Arg	Leu	Gly	Ile	Gln	Lys	Ile	Phe	Leu	Cys	Lys	Tyr	Ser	Gly	Tyr	435	440	445
Leu	Ala	Val	Ala	Gly	Thr	Ala	Gly	Gln	Val	Leu	Val	Leu	Glu	Leu	Asn	450	455	460
Asp	Glu	Ala	Ala	Glu	Gln	Ala	Val	Glu	Gln	Val	Glu	Ala	Asp	Leu	Leu	465	470	475
Gln	Asp	Gln	Glu	Gly	Tyr	Arg	Trp	Lys	Gly	His	Glu	Arg	Leu	Ala	Ala	485	490	495
Arg	Ser	Gly	Pro	Val	Arg	Phe	Glu	Pro	Gly	Phe	Gln	Pro	Phe	Val	Leu	500	505	510
Val	Gln	Cys	Gln	Pro	Pro	Ala	Val	Val	Thr	Ser	Leu	Ala	Leu	His	Ser	515	520	525
Glu	Trp	Arg	Leu	Val	Ala	Phe	Gly	Thr	Ser	His	Gly	Phe	Gly	Leu	Phe	530	535	540
Asp	His	Gln	Gln	Arg	Arg	Gln	Val	Phe	Val	Lys	Cys	Thr	Leu	His	Pro	545	550	555
Ser	Asp	Gln	Leu	Ala	Leu	Glu	Gly	Pro	Leu	Ser	Arg	Val	Lys	Ser	Leu	565	570	575
Lys	Lys	Ser	Leu	Arg	Gln	Ser	Phe	Arg	Arg	Met	Arg	Arg	Ser	Arg	Val	580	585	590
Ser	Ser	Arg	Lys	Arg	His	Pro	Ala	Gly	Pro	Pro	Gly	Glu	Ala	Gln	Glu	595	600	605
Gly	Ser	Ala	Lys	Ala	Glu	Arg	Pro	Gly	Leu	Gln	Asn	Met	Glu	Leu	Ala	610	615	620

Pro Val Gln Arg Lys Ile Glu Ala Arg Ser Ala Glu Asp Ser Phe Thr
 625 630 635 640
 Gly Phe Val Arg Thr Leu Tyr Phe Ala Asp Thr Tyr Leu Lys Asp Ser
 645 650 655
 Ser Arg His Cys Pro Ser Leu Trp Ala Gly Thr Asn Gly Gly Thr Ile
 660 665 670
 Tyr Ala Phe Ser Leu Arg Val Pro Pro Ala Glu Arg Arg Met Asp Glu
 675 680 685
 Pro Val Arg Ala Glu Gln Ala Lys Glu Ile Gln Leu Met His Arg Ala
 690 695 700
 Pro Val Val Gly Ile Leu Val Leu Asp Gly His Ser Val Pro Leu Pro
 705 710 715 720
 Glu Pro Leu Glu Val Ala His Asp Leu Ser Lys Ser Pro Asp Met Gln
 725 730 735
 Gly Ser His Gln Leu Leu Val Val Ser Glu Glu Gln Phe Lys Val Phe
 740 745 750
 Thr Leu Pro Lys Val Ser Ala Lys Leu Lys Leu Lys Leu Thr Ala Leu
 755 760 765
 Glu Gly Ser Arg Val Arg Arg Val Ser Val Ala His Phe Gly Ser Arg
 770 775 780
 Arg Ala Glu Asp Tyr Gly Glu His His Leu Ala Val Leu Thr Asn Leu
 785 790 795 800
 Gly Asp Ile Gln Val Val Ser Leu Pro Leu Leu Lys Pro Gln Val Arg
 805 810 815
 Tyr Ser Cys Ile Arg Arg Glu Asp Val Ser Gly Ile Ala Ser Cys Val
 820 825 830
 Phe Thr Lys Tyr Gly Gln Gly Phe Tyr Leu Ile Ser Pro Ser Glu Phe
 835 840 845
 Glu Arg Phe Ser Leu Ser Thr Lys Trp Leu Val Glu Pro Arg Cys Leu
 850 855 860
 Val Asp Ser Ala Glu Thr Lys Asn His Arg Pro Gly Asn Gly Ala Gly
 865 870 875 880
 Pro Lys Lys Ala Pro Ser Arg Ala Arg Asn Ser Gly Thr Gln Ser Asp
 885 890 895
 Gly Glu Glu Lys Gln Pro Gly Leu Val Met Glu Arg Ala Leu Leu Ser
 900 905 910
 Asp Glu Arg Ala Ala Thr Gly Val His Ile Glu Pro Pro Trp Gly Ala
 915 920 925
 Ala Ser Ala Met Ala Glu Gln Ser Glu Trp Leu Ser Val Gln Ala Ala
 930 935 940
 Arg *
 945

<210> 1900

<211> 778

<212> PRT

<213> Homo sapiens

<400> 1900

Met Pro Leu Ala Pro Thr Met Ala Pro Ala Pro Ala Ala Pro Ser Thr
 1 5 10 15
 Ala Trp Pro Thr Ser Pro Glu Ser Pro Val Val Ser Thr Pro Thr Lys
 20 25 30
 Ser Met Gln Ala Leu Ser Thr Val Pro Leu Asp Trp Val Thr Val Pro
 35 40 45
 Lys Leu Gln Glu Cys Gly Ala Arg Pro Ala Met Glu Lys Pro Thr Arg
 50 55 60
 Val Val Gly Gly Phe Gly Ala Ala Ser Gly Glu Val Pro Trp Gln Val
 65 70 75 80
 Ser Leu Lys Glu Gly Ser Arg His Phe Cys Gly Ala Thr Val Val Gly
 85 90 95

Asp	Arg	Trp	Leu	Leu	Ser	Ala	Ala	His	Cys	Phe	Asn	His	Thr	Lys	Val
			100					105					110		
Glu	Gln	Val	Arg	Ala	His	Leu	Gly	Thr	Ala	Ser	Leu	Leu	Gly	Leu	Gly
		115					120					125			
Gly	Ser	Pro	Val	Lys	Ile	Gly	Leu	Arg	Arg	Val	Val	Leu	His	Pro	Leu
		130				135					140				
Tyr	Asn	Pro	Gly	Ile	Leu	Asp	Phe	Asp	Leu	Ala	Val	Leu	Glu	Leu	Ala
145					150					155					160
Ser	Pro	Leu	Ala	Phe	Asn	Lys	Tyr	Ile	Gln	Pro	Val	Cys	Leu	Pro	Leu
			165						170					175	
Ala	Ile	Gln	Lys	Phe	Pro	Val	Gly	Arg	Lys	Cys	Met	Ile	Ser	Gly	Trp
			180					185					190		
Gly	Asn	Thr	Gln	Glu	Gly	Asn	Ala	Thr	Lys	Pro	Glu	Leu	Leu	Gln	Lys
		195				200						205			
Ala	Ser	Val	Gly	Ile	Ile	Asp	Gln	Lys	Thr	Cys	Ser	Val	Leu	Tyr	Asn
		210				215					220				
Phe	Ser	Leu	Thr	Asp	Arg	Met	Ile	Cys	Ala	Gly	Phe	Leu	Glu	Gly	Lys
225					230					235					240
Val	Asp	Ser	Cys	Gln	Val	Ser	Gly	Ile	Lys	Ala	Leu	Tyr	Glu	Ser	Glu
			245						250					255	
Leu	Ala	Asp	Ala	Arg	Arg	Val	Leu	Asp	Glu	Thr	Ala	Arg	Glu	Arg	Ala
			260					265					270		
Arg	Leu	Gln	Ile	Glu	Ile	Gly	Lys	Leu	Arg	Ala	Glu	Leu	Asp	Glu	Val
		275					280					285			
Asn	Lys	Ser	Ala	Lys	Lys	Arg	Glu	Gly	Glu	Leu	Thr	Val	Ala	Gln	Gly
		290				295					300				
Arg	Val	Lys	Asp	Leu	Glu	Ser	Leu	Phe	His	Arg	Ser	Glu	Val	Glu	Leu
305					310					315					320
Ala	Ala	Ala	Leu	Ser	Asp	Lys	Arg	Gly	Leu	Glu	Ser	Asp	Val	Ala	Glu
			325						330					335	
Leu	Arg	Ala	Gln	Leu	Ala	Lys	Ala	Glu	Asp	Gly	His	Ala	Val	Ala	Lys
			340					345					350		
Lys	Gln	Leu	Glu	Lys	Glu	Thr	Leu	Met	Arg	Val	Asp	Leu	Glu	Asn	Arg
		355					360					365			
Cys	Gln	Ser	Leu	Gln	Glu	Glu	Leu	Asp	Phe	Arg	Lys	Ser	Val	Phe	Glu
		370				375					380				
Glu	Glu	Val	Arg	Glu	Thr	Arg	Arg	Arg	His	Glu	Arg	Arg	Leu	Val	Glu
385					390					395					400
Val	Asp	Ser	Ser	Arg	Gln	Gln	Glu	Tyr	Asp	Phe	Lys	Met	Ala	Gln	Ala
				405					410					415	
Leu	Glu	Glu	Leu	Arg	Ser	Gln	His	Asp	Glu	Gln	Val	Arg	Leu	Tyr	Lys
			420					425					430		
Leu	Glu	Leu	Glu	Gln	Thr	Tyr	Gln	Ala	Lys	Leu	Asp	Ser	Ala	Lys	Leu
		435					440					445			
Ser	Ser	Asp	Gln	Asn	Asp	Lys	Ala	Ala	Ser	Ala	Ala	Arg	Glu	Glu	Leu
		450				455					460				
Lys	Glu	Ala	Arg	Met	Arg	Leu	Glu	Ser	Leu	Ser	Tyr	Gln	Leu	Ser	Gly
465					470					475					480
Leu	Gln	Lys	Gln	Ala	Ser	Ala	Ala	Glu	Asp	Arg	Ile	Arg	Glu	Leu	Glu
				485					490					495	
Glu	Ala	Met	Ala	Gly	Glu	Arg	Asp	Lys	Phe	Arg	Lys	Met	Leu	Asp	Ala
			500					505					510		
Lys	Glu	Gln	Glu	Met	Thr	Glu	Met	Arg	Asp	Val	Met	Gln	Gln	Gln	Leu
		515					520					525			
Ala	Glu	Tyr	Gln	Glu	Leu	Leu	Asp	Val	Lys	Leu	Ala	Leu	Asp	Met	Glu
					535						540				
Ile	Asn	Ala	Tyr	Arg	Lys	Leu	Leu	Glu	Gly	Glu	Glu	Arg	Leu	Lys	
545					550					555					560
Leu	Ser	Pro	Ser	Pro	Ser	Ser	Arg	Val	Thr	Val	Ser	Arg	Ala	Thr	Ser
				565					570					575	
Ser	Ser	Ser	Gly	Ser	Leu	Ser	Ala	Thr	Gly	Arg	Leu	Gly	Arg	Ser	Lys
			580					585					590		
Arg	Lys	Arg	Leu	Glu	Val	Glu	Glu	Pro	Leu	Gly	Ser	Gly	Pro	Ser	Val
			595				600					605			

Leu Gly Thr Gly Thr Gly Gly Ser Gly Gly Phe His Leu Ala Gln Gln
 610 615 620
 Ala Ser Ala Ser Gly Ser Val Ser Ile Glu Glu Ile Asp Leu Glu Gly
 625 630 635 640
 Lys Phe Val Gln Leu Lys Asn Asn Ser Asp Lys Asp Gln Ser Leu Gly
 645 650 655
 Asn Trp Arg Ile Lys Arg Gln Val Leu Glu Gly Glu Glu Ile Ala Tyr
 660 665 670
 Lys Phe Thr Pro Lys Tyr Ile Leu Arg Ala Gly Gln Met Val Thr Val
 675 680 685
 Trp Ala Ala Gly Ala Gly Val Ala His Ser Pro Pro Ser Thr Leu Val
 690 695 700
 Trp Lys Gly Gln Ser Ser Trp Gly Thr Gly Glu Ser Phe Arg Thr Val
 705 710 715 720
 Leu Val Asn Ala Asp Gly Glu Glu Val Ala Met Arg Thr Val Lys Lys
 725 730 735
 Ser Ser Val Met Arg Glu Asn Glu Asn Gly Glu Glu Glu Glu Glu Glu
 740 745 750
 Ala Glu Phe Gly Glu Glu Asp Leu Phe His Gln Gln Gly Asp Pro Arg
 755 760 765
 Thr Thr Ser Arg Gly Cys Tyr Val Met *
 770 775 777

<210> 1901

<211> 616

<212> PRT

<213> Homo sapiens

<400> 1901

Met Phe Ala Arg Gly Ser Arg Arg Arg Arg Ser Gly Arg Ala Pro Pro
 1 5 10 15
 Glu Ala Glu Asp Pro Asp Arg Gly Gln Pro Cys Asn Ser Cys Arg Glu
 20 25 30
 Gln Cys Pro Gly Phe Leu Leu His Gly Trp Arg Lys Ile Cys Gln His
 35 40 45
 Cys Lys Cys Pro Arg Glu Glu His Ala Val His Ala Val Pro Val Asp
 50 55 60
 Leu Glu Arg Ile Met Cys Arg Leu Ile Ser Asp Phe Gln Arg His Ser
 65 70 75 80
 Ile Ser Asp Asp Asp Ser Gly Cys Ala Ser Glu Glu Tyr Ala Trp Val
 85 90 95
 Pro Pro Gly Leu Lys Pro Glu Gln Val Tyr Gln Phe Phe Ser Cys Leu
 100 105 110
 Pro Glu Asp Lys Val Pro Tyr Val Asn Ser Pro Gly Glu Lys Tyr Arg
 115 120 125
 Ile Lys Gln Leu Leu His Gln Leu Pro Pro His Asp Ser Glu Ala Gln
 130 135 140
 Tyr Cys Thr Ala Leu Glu Glu Glu Lys Lys Glu Leu Arg Ala Phe
 145 150 155 160
 Ser Gln Gln Arg Lys Arg Glu Asn Leu Gly Arg Gly Ile Val Arg Ile
 165 170 175
 Phe Pro Val Thr Ile Thr Gly Ala Ile Cys Glu Glu Cys Gly Lys Gln
 180 185 190
 Ile Gly Gly Gly Asp Ile Ala Val Phe Ala Ser Arg Ala Gly Leu Gly
 195 200 205
 Ala Cys Trp His Pro Gln Cys Phe Val Cys Thr Thr Cys Gln Glu Leu
 210 215 220
 Leu Val Asp Leu Ile Tyr Phe Tyr His Val Gly Lys Val Tyr Cys Gly
 225 230 235 240
 Arg His His Ala Glu Cys Leu Arg Pro Arg Cys Gln Ala Cys Asp Glu
 245 250 255

Ile Ile Phe Ser Pro Glu Cys Thr Glu Ala Glu Gly Arg His Trp His
 260 265 270
 Met Asp His Phe Cys Cys Phe Glu Cys Glu Ala Ser Leu Gly Gly Gln
 275 280 285
 Arg Tyr Val Met Arg Gln Ser Arg Pro His Cys Cys Ala Cys Tyr Glu
 290 295 300
 Ala Arg His Ala Glu Tyr Cys Asp Gly Cys Gly Glu His Ile Gly Leu
 305 310 315 320
 Asp Gln Gly Gln Met Ala Tyr Glu Gly Gln His Trp His Ala Ser Asp
 325 330 335
 Arg Cys Phe Cys Cys Ser Arg Cys Gly Arg Ala Leu Leu Gly Arg Pro
 340 345 350
 Phe Leu Pro Arg Arg Gly Leu Ile Phe Cys Ser Arg Ala Cys Ser Leu
 355 360 365
 Gly Ser Glu Pro Thr Ala Pro Gly Pro Ser Arg Arg Ser Trp Ser Ala
 370 375 380
 Gly Pro Val Thr Ala Pro Leu Ala Ala Ser Thr Ala Ser Phe Ser Ala
 385 390 395 400
 Val Lys Gly Ala Ser Glu Thr Thr Thr Lys Gly Thr Ser Thr Glu Leu
 405 410 415
 Ala Pro Ala Thr Gly Pro Glu Glu Pro Ser Arg Phe Leu Arg Gly Ala
 420 425 430
 Pro His Arg His Ser Met Pro Glu Leu Gly Leu Arg Ser Val Pro Glu
 435 440 445
 Pro Pro Pro Glu Ser Pro Gly Gln Pro Asn Leu Arg Pro Asp Asp Ser
 450 455 460
 Ala Phe Gly Arg Gln Ser Thr Pro Arg Val Ser Phe Arg Asp Pro Leu
 465 470 475 480
 Val Ser Glu Gly Gly Pro Arg Arg Thr Leu Ser Ala Pro Pro Ala Gln
 485 490 495
 Arg Arg Arg Pro Arg Ser Pro Pro Pro Arg Ala Pro Ser Arg Arg Arg
 500 505 510
 His His His His Asn His His His His Asn Arg His Pro Ser Arg
 515 520 525
 Arg Arg His Tyr Gln Cys Asp Ala Gly Ser Gly Ser Asp Ser Glu Ser
 530 535 540
 Cys Ser Ser Ser Pro Ser Ser Ser Ser Ser Glu Ser Ser Glu Asp Asp
 545 550 555 560
 Gly Phe Phe Leu Gly Glu Arg Ile Pro Leu Pro Pro His Leu Cys Arg
 565 570 575
 Pro Met Pro Ala Gln Asp Thr Ala Met Glu Thr Phe Asn Ser Pro Ser
 580 585 590
 Leu Ser Leu Pro Arg Asp Ser Arg Ala Gly Met Pro Arg Gln Ala Arg
 595 600 605
 Asp Lys Asn Cys Ile Val Ala *
 610 615

<210> 1902

<211> 1249

<212> PRT

<213> Homo sapiens

<400> 1902

Met Met Thr Gly Tyr Asn Asn Gly Arg Cys Pro Arg Asn Ser Leu Tyr
 1 5 10 15
 Ser Asp Cys Ile Ile Glu Glu Lys Thr Val Val Leu Gln Lys Lys Asp
 20 25 30
 Asn Glu Gly Phe Gly Phe Val Leu Arg Gly Ala Lys Ala Asp Thr Pro
 35 40 45
 Ile Glu Glu Phe Thr Pro Thr Pro Ala Phe Pro Ala Leu Gln Tyr Leu
 50 55 60

Glu	Ser	Val	Asp	Glu	Gly	Gly	Val	Ala	Trp	Gln	Ala	Gly	Leu	Arg	Thr
65					70					75					80
Gly	Asp	Phe	Leu	Ile	Glu	Val	Asn	Asn	Glu	Asn	Val	Val	Lys	Val	Gly
				85					90					95	
His	Arg	Gln	Val	Val	Asn	Met	Ile	Arg	Gln	Gly	Gly	Asn	His	Leu	Val
			100					105					110		
Leu	Lys	Val	Val	Thr	Val	Thr	Arg	Asn	Leu	Asp	Pro	Asp	Asp	Thr	Ala
		115					120					125			
Arg	Lys	Lys	Ala	Pro	Pro	Pro	Pro	Lys	Arg	Ala	Pro	Thr	Thr	Ala	Leu
						135					140				
Thr	Leu	Arg	Ser	Lys	Ser	Met	Thr	Ser	Glu	Leu	Glu	Glu	Leu	Val	Asp
145					150					155					160
Lys	Ala	Ser	Val	Arg	Lys	Lys	Lys	Asp	Lys	Pro	Glu	Glu	Ile	Val	Pro
			165					170						175	
Ala	Ser	Lys	Pro	Ser	Arg	Ala	Ala	Glu	Asn	Met	Ala	Val	Glu	Pro	Arg
			180					185					190		
Val	Ala	Thr	Ile	Lys	Gln	Arg	Pro	Ser	Ser	Arg	Cys	Phe	Pro	Ala	Gly
		195					200					205			
Ser	Asp	Met	Asn	Ser	Val	Tyr	Glu	Arg	Gln	Gly	Ile	Ala	Val	Met	Thr
	210					215					220				
Pro	Thr	Val	Pro	Gly	Ser	Pro	Lys	Ala	Pro	Phe	Leu	Gly	Ile	Pro	Arg
225					230					235					240
Gly	Thr	Met	Arg	Arg	Gln	Lys	Ser	Ile	Asp	Ser	Arg	Ile	Phe	Leu	Ser
				245					250					255	
Gly	Ile	Thr	Glu	Glu	Glu	Arg	Gln	Phe	Leu	Ala	Pro	Pro	Met	Leu	Lys
			260					265						270	
Phe	Thr	Arg	Ser	Leu	Ser	Met	Pro	Asp	Thr	Ser	Glu	Asp	Ile	Pro	Pro
		275					280					285			
Pro	Pro	Gln	Ser	Val	Pro	Pro	Ser	Pro	Pro	Pro	Pro	Ser	Pro	Thr	Thr
	290					295					300				
Tyr	Asn	Cys	Pro	Lys	Ser	Pro	Thr	Pro	Arg	Val	Tyr	Gly	Thr	Ile	Lys
305					310					315					320
Pro	Ala	Phe	Asn	Gln	Asn	Ser	Ala	Ala	Lys	Val	Ser	Pro	Ala	Thr	Arg
			325						330					335	
Ser	Asp	Thr	Val	Ala	Thr	Met	Met	Arg	Glu	Lys	Gly	Met	Tyr	Phe	Arg
			340					345					350		
Arg	Glu	Leu	Asp	Arg	Tyr	Ser	Leu	Asp	Ser	Glu	Asp	Leu	Tyr	Ser	Arg
		355					360					365			
Asn	Ala	Gly	Pro	Gln	Ala	Asn	Phe	Arg	Asn	Lys	Arg	Gly	Gln	Met	Pro
	370					375					380				
Glu	Asn	Pro	Tyr	Ser	Glu	Val	Gly	Lys	Ile	Ala	Ser	Lys	Ala	Val	Tyr
385					390					395					400
Val	Pro	Ala	Lys	Pro	Ala	Arg	Arg	Lys	Gly	Met	Leu	Val	Lys	Gln	Ser
			405						410					415	
Asn	Val	Glu	Asp	Ser	Pro	Glu	Lys	Thr	Cys	Ser	Ile	Pro	Ile	Pro	Thr
			420					425					430		
Ile	Ile	Val	Lys	Glu	Pro	Ser	Thr	Ser	Ser	Ser	Gly	Lys	Ser	Ser	Gln
		435					440					445			
Gly	Ser	Ser	Met	Glu	Ile	Asp	Pro	Gln	Ala	Pro	Glu	Pro	Pro	Ser	Gln
	450					455					460				
Leu	Arg	Pro	Asp	Glu	Ser	Leu	Thr	Val	Ser	Ser	Pro	Phe	Ala	Ala	Ala
465					470					475					480
Ile	Ala	Gly	Ala	Val	Arg	Asp	Arg	Glu	Lys	Arg	Leu	Glu	Ala	Arg	Arg
			485					490						495	
Asn	Ser	Pro	Ala	Phe	Leu	Ser	Thr	Asp	Leu	Gly	Asp	Glu	Asp	Val	Gly
			500					505					510		
Leu	Gly	Pro	Pro	Ala	Pro	Arg	Thr	Arg	Pro	Ser	Met	Phe	Pro	Glu	Glu
		515					520					525			
Gly	Asp	Phe	Ala	Asp	Glu	Asp	Ser	Ala	Glu	Gln	Leu	Ser	Ser	Pro	Met
	530					535					540				
Pro	Ser	Ala	Thr	Pro	Arg	Glu	Pro	Glu	Asn	His	Phe	Val	Gly	Gly	Ala
545					550					555					560
Glu	Ala	Ser	Ala	Pro	Gly	Glu	Ala	Gly	Arg	Pro	Leu	Asn	Ser	Thr	Ser
			565						570					575	

Lys	Ala	Gln	Gly	Pro	Glu	Ser	Ser	Pro	Ala	Val	Pro	Ser	Ala	Ser	Ser	580	585	590
Gly	Thr	Ala	Gly	Pro	Gly	Asn	Tyr	Val	His	Pro	Leu	Thr	Gly	Arg	Leu	595	600	605
Leu	Asp	Pro	Ser	Ser	Pro	Leu	Ala	Leu	Ala	Leu	Ser	Ala	Arg	Asp	Arg	610	615	620
Ala	Met	Lys	Glu	Ser	Gln	Gln	Gly	Pro	Lys	Gly	Glu	Ala	Pro	Lys	Ala	625	630	635
Asp	Leu	Asn	Lys	Pro	Leu	Tyr	Ile	Asp	Thr	Lys	Met	Arg	Pro	Ser	Leu	645	650	655
Asp	Ala	Gly	Phe	Pro	Thr	Val	Thr	Arg	Gln	Asn	Thr	Arg	Gly	Pro	Leu	660	665	670
Arg	Arg	Gln	Glu	Thr	Glu	Asn	Lys	Tyr	Glu	Thr	Asp	Leu	Gly	Arg	Asp	675	680	685
Arg	Lys	Gly	Asp	Asp	Lys	Lys	Asn	Met	Leu	Ile	Asp	Ile	Met	Asp	Thr	690	695	700
Ser	Gln	Gln	Lys	Ser	Ala	Gly	Leu	Leu	Met	Val	His	Thr	Val	Asp	Ala	705	710	715
Thr	Lys	Leu	Asp	Asn	Ala	Leu	Gln	Glu	Glu	Asp	Glu	Lys	Ala	Glu	Val	725	730	735
Glu	Met	Lys	Pro	Asp	Ser	Ser	Pro	Ser	Glu	Val	Pro	Glu	Gly	Val	Ser	740	745	750
Glu	Thr	Glu	Gly	Ala	Leu	Gln	Ile	Ser	Ala	Ala	Pro	Glu	Pro	Thr	Thr	755	760	765
Val	Pro	Gly	Arg	Thr	Ile	Val	Ala	Val	Gly	Ser	Met	Glu	Glu	Ala	Val	770	775	780
Ile	Leu	Pro	Phe	Arg	Ile	Pro	Pro	Pro	Pro	Leu	Ala	Ser	Val	Asp	Leu	785	790	795
Asp	Glu	Asp	Phe	Ile	Phe	Thr	Glu	Pro	Leu	Pro	Pro	Pro	Leu	Glu	Phe	805	810	815
Ala	Asn	Ser	Phe	Asp	Ile	Pro	Asp	Asp	Arg	Ala	Ala	Ser	Val	Pro	Ala	820	825	830
Leu	Ser	Asp	Leu	Val	Lys	Gln	Lys	Lys	Ser	Asp	Thr	Pro	Gln	Ser	Pro	835	840	845
Ser	Leu	Asn	Ser	Ser	Gln	Pro	Thr	Asn	Ser	Ala	Asp	Ser	Lys	Lys	Pro	850	855	860
Ala	Ser	Leu	Ser	Asn	Cys	Leu	Pro	Ala	Ser	Phe	Leu	Pro	Pro	Pro	Glu	865	870	875
Ser	Phe	Asp	Ala	Val	Ala	Asp	Ser	Gly	Ile	Glu	Glu	Val	Asp	Ser	Arg	885	890	895
Ser	Ser	Ser	Asp	His	His	Leu	Glu	Thr	Thr	Ser	Thr	Ile	Ser	Thr	Val	900	905	910
Ser	Ser	Ile	Ser	Thr	Leu	Ser	Ser	Glu	Gly	Gly	Glu	Asn	Val	Asp	Thr	915	920	925
Cys	Thr	Val	Tyr	Ala	Asp	Gly	Gln	Ala	Phe	Met	Val	Asp	Lys	Pro	Pro	930	935	940
Val	Pro	Pro	Lys	Pro	Lys	Met	Lys	Pro	Ile	Ile	His	Lys	Ser	Asn	Ala	945	950	955
Leu	Tyr	Gln	Asp	Ala	Leu	Val	Glu	Glu	Asp	Val	Asp	Ser	Phe	Val	Ile	965	970	975
Pro	Pro	Pro	Ala	Pro	Pro	Pro	Pro	Pro	Gly	Ser	Ala	Gln	Pro	Gly	Met	980	985	990
Ala	Lys	Val	Leu	Gln	Pro	Arg	Thr	Ser	Lys	Leu	Trp	Gly	Asp	Val	Thr	995	1000	1005
Glu	Ile	Lys	Ser	Pro	Ile	Leu	Ser	Gly	Pro	Lys	Ala	Asn	Val	Ile	Ser	1010	1015	1020
Glu	Leu	Asn	Ser	Ile	Leu	Gln	Gln	Met	Asn	Arg	Glu	Lys	Leu	Ala	Lys	1025	1030	1035
Pro	Gly	Glu	Gly	Leu	Asp	Ser	Pro	Met	Gly	Ala	Lys	Ser	Ala	Ser	Leu	1045	1050	1055
Ala	Pro	Arg	Ser	Pro	Glu	Ile	Met	Ser	Thr	Ile	Ser	Gly	Thr	Arg	Ser	1060	1065	1070
Thr	Thr	Val	Thr	Phe	Thr	Val	Arg	Pro	Gly	Thr	Ser	Gln	Pro	Ile	Thr	1075	1080	1085

Leu Gln Ser Arg Pro Pro Asp Tyr Glu Ser Arg Thr Ser Gly Thr Arg
 1090 1095 1100
 Arg Ala Pro Ser Pro Val Val Ser Pro Thr Glu Met Asn Lys Glu Thr
 1105 1110 1115 1120
 Leu Pro Ala Pro Leu Ser Ala Ala Thr Ala Ser Pro Ser Pro Ala Leu
 1125 1130 1135
 Ser Asp Val Phe Ser Leu Pro Ser Gln Pro Pro Ser Gly Asp Leu Phe
 1140 1145 1150
 Gly Leu Asn Pro Ala Gly Arg Ser Arg Ser Pro Ser Pro Ser Ile Leu
 1155 1160 1165
 Gln Gln Pro Ile Ser Asn Lys Pro Phe Thr Thr Lys Pro Val His Leu
 1170 1175 1180
 Trp Thr Lys Pro Asp Val Ala Asp Trp Leu Glu Ser Leu Asn Leu Gly
 1185 1190 1195 1200
 Glu His Lys Glu Ala Phe Met Asp Asn Glu Ile Asp Gly Ser His Leu
 1205 1210 1215
 Pro Asn Leu Gln Lys Glu Asp Leu Ile Asp Leu Gly Val Thr Arg Val
 1220 1225 1230
 Gly His Arg Met Asn Ile Glu Arg Ala Leu Lys Gln Leu Leu Asp Arg
 1235 1240 1245 1248

*

<210> 1903
 <211> 355
 <212> PRT
 <213> Homo sapiens

<400> 1903
 Met Asn Leu Leu Thr Leu Asp Val Lys Lys Lys Ile Lys Glu Val Thr
 1 5 10 15
 Glu Glu Val Ala Asn Lys Val Ser Cys Ala Met Thr Asp Glu Ile Cys
 20 25 30
 Arg Leu Ser Val Leu Val Asp Glu Phe Cys Ser Glu Phe His Pro Asn
 35 40 45
 Pro Asp Val Leu Lys Ile Tyr Lys Ser Glu Leu Asn Lys His Ile Glu
 50 55 60
 Asp Gly Met Gly Arg Asn Leu Ala Asp Arg Cys Thr Asp Glu Val Asn
 65 70 75 80
 Ala Leu Val Leu Gln Thr Gln Gln Glu Ile Ile Glu Asn Leu Lys Pro
 85 90 95
 Leu Leu Pro Ala Gly Ile Gln Asp Lys Leu His Thr Leu Ile Pro Cys
 100 105 110
 Lys Lys Phe Asp Leu Ser Tyr Asn Leu Asn Tyr His Lys Leu Cys Ser
 115 120 125
 Asp Phe Gln Glu Asp Ile Val Phe Arg Phe Ser Leu Gly Trp Ser Ser
 130 135 140
 Leu Val His Arg Phe Leu Gly Pro Arg Asn Ala Gln Arg Val Leu Leu
 145 150 155 160
 Gly Leu Ser Glu Pro Ile Phe Gln Leu Pro Arg Ser Leu Ala Ser Thr
 165 170 175
 Pro Thr Ala Pro Thr Thr Pro Ala Thr Pro Asp Asn Ala Ser Gln Glu
 180 185 190
 Glu Leu Met Ile Thr Leu Val Thr Gly Leu Ala Ser Val Thr Ser Arg
 195 200 205
 Thr Ser Met Gly Ile Ile Ile Val Gly Gly Val Ile Trp Lys Thr Ile
 210 215 220
 Gly Trp Lys Leu Leu Ser Val Ser Leu Thr Met Tyr Gly Ala Leu Tyr
 225 230 235 240
 Leu Tyr Glu Arg Leu Ser Trp Thr Thr His Ala Lys Glu Arg Ala Phe
 245 250 255

Lys Gln Gln Phe Val Asn Tyr Ala Thr Glu Lys Leu Arg Met Ile Val
 260 265 270
 Ser Ser Thr Ser Ala Asn Cys Ser His Gln Val Lys Gln Gln Ile Ala
 275 280 285
 Thr Thr Phe Ala Arg Leu Cys Gln Gln Val Asp Ile Thr Gln Lys Gln
 290 295 300
 Leu Glu Glu Glu Ile Ala Arg Leu Pro Lys Glu Ile Asp Gln Leu Glu
 305 310 315 320
 Lys Ile Gln Asn Asn Ser Lys Leu Leu Arg Asn Lys Ala Val Gln Leu
 325 330 335
 Glu Asn Glu Leu Glu Asn Phe Thr Lys Gln Phe Leu Pro Ser Ser Asn
 340 345 350
 Glu Glu Ser
 355

<210> 1904
 <211> 245
 <212> PRT
 <213> Homo sapiens

<400> 1904
 Met Asn Leu Leu Thr Leu Asp Val Lys Lys Lys Ile Lys Glu Val Thr
 1 5 10 15
 Glu Glu Val Pro Asn Lys Val Ser Cys Ala Met Thr Asp Glu Ile Cys
 20 25 30
 Arg Leu Ser Val Leu Val Asp Glu Phe Cys Ser Glu Phe His Pro Asn
 35 40 45
 Pro Asp Val Leu Lys Ile Tyr Lys Ser Leu Pro Arg Ser Leu Ala Ser
 50 55 60
 Thr Pro Thr Ala Pro Thr Thr Pro Ala Thr Pro Asp Asn Ala Ser Gln
 65 70 75 80
 Glu Glu Leu Met Ile Thr Leu Val Thr Gly Leu Ala Ser Val Thr Ser
 85 90 95
 Arg Thr Ser Met Gly Ile Ile Ile Val Gly Gly Val Ile Trp Lys Thr
 100 105 110
 Ile Gly Trp Lys Leu Leu Ser Val Ser Leu Thr Met Tyr Gly Ala Leu
 115 120 125
 Tyr Leu Tyr Glu Arg Leu Ser Trp Thr Thr His Ala Lys Glu Arg Ala
 130 135 140
 Phe Lys Gln Gln Phe Val Asn Tyr Ala Thr Glu Lys Leu Arg Met Ile
 145 150 155 160
 Val Ser Ser Thr Ser Ala Asn Cys Ser His Gln Val Lys Gln Gln Ile
 165 170 175
 Ala Thr Thr Phe Ala Arg Leu Cys Gln Gln Val Asp Ile Thr His Lys
 180 185 190
 Gln Leu Glu Glu Glu Ile Ala Arg Leu Pro Lys Glu Ile Asp Gln Leu
 195 200 205
 Glu Lys Ile Gln Asn Asn Ser Lys Leu Leu Arg Asn Lys Ala Val Gln
 210 215 220
 Leu Glu Asn Glu Leu Glu Asn Phe Thr Lys Gln Phe Leu Pro Ser Ser
 225 230 235 240
 Asn Glu Glu Ser *
 244

<210> 1905
 <211> 276
 <212> PRT
 <213> Homo sapiens

<400> 1905

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Met Thr Asp Asp Lys Asp Val Leu Arg Asp Val Trp Phe Gly Arg Ile
 1          5          10          15
Pro Thr Cys Phe Thr Leu Tyr Gln Asp Glu Ile Thr Glu Arg Glu Ala
          20          25          30
Glu Pro Tyr Tyr Leu Leu Leu Pro Arg Val Ser Tyr Leu Thr Leu Val
          35          40          45
Thr Asp Lys Val Lys Lys His Phe Gln Lys Val Met Arg Gln Glu Asp
          50          55          60
Ile Ser Glu Ile Trp Phe Glu Tyr Glu Gly Thr Pro Leu Lys Trp His
          65          70          75          80
Tyr Pro Ile Gly Leu Leu Phe Asp Leu Leu Ala Ser Ser Ser Ala Leu
          85          90          95
Pro Trp Asn Ile Thr Val His Phe Lys Ser Phe Pro Glu Lys Asp Leu
          100          105          110
Leu His Cys Pro Ser Lys Asp Ala Ile Glu Ala His Phe Met Ser Cys
          115          120          125
Met Lys Glu Ala Asp Ala Leu Lys His Lys Ser Gln Val Ile Asn Glu
          130          135          140
Met Gln Lys Lys Asp His Lys Gln Leu Trp Met Gly Leu Gln Asn Asp
          145          150          155          160
Arg Phe Asp Gln Phe Trp Ala Ile Asn Arg Lys Leu Met Glu Tyr Pro
          165          170          175
Ala Glu Glu Asn Gly Phe Arg Tyr Ile Pro Phe Arg Ile Tyr Gln Thr
          180          185          190
Thr Thr Glu Arg Pro Phe Ile Gln Lys Leu Phe Arg Pro Val Ala Ala
          195          200          205
Asp Gly Gln Leu His Thr Leu Gly Asp Leu Leu Lys Glu Val Cys Pro
          210          215          220
Ser Ala Ile Asp Pro Glu Asp Gly Glu Lys Lys Asn Gln Val Met Ile
          225          230          235          240
His Gly Ile Glu Pro Met Leu Glu Thr Pro Leu Gln Trp Leu Ser Glu
          245          250          255
His Leu Ser Tyr Pro Asp Asn Phe Leu His Ile Ser Ile Ile Pro Gln
          260          265          270
Pro Thr Asp *
          275

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<210> 1906

<211> 128

<212> PRT

<213> Homo sapiens

<400> 1906

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Met Cys Pro Leu Pro Leu Ala Ala Ala Val Ala Ala Pro Arg Ala
 1          5          10          15
Pro Leu Arg Leu Leu Asn Arg Gly Leu Ala Ala Ala Met Ser Thr Ala
          20          25          30
Gln Ser Leu Lys Ser Val Asp Tyr Glu Val Phe Gly Arg Val Gln Gly
          35          40          45
Val Cys Phe Arg Met Tyr Thr Glu Asp Glu Ala Arg Lys Ile Gly Val
          50          55          60
Val Gly Trp Val Lys Asn Thr Ser Lys Gly Thr Val Thr Gly Gln Val
          65          70          75          80
Gln Gly Pro Glu Asp Lys Val Asn Ser Met Lys Ser Trp Leu Ser Lys
          85          90          95
Val Gly Ser Pro Ser Ser Arg Ile Asp Arg Thr Asn Phe Ser Asn Glu
          100          105          110
Lys Thr Ile Ser Lys Leu Glu Tyr Ser Asn Phe Ser Ile Arg Tyr *
          115          120          125          127

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<210> 1907
 <211> 287
 <212> PRT
 <213> Homo sapiens

<400> 1907
 Met Ser Ala Pro Leu Asp Ala Ala Leu His Ala Leu Gln Glu Glu Gln
 1 5 10 15
 Ala Arg Leu Lys Met Arg Leu Trp Asp Leu Gln Gln Leu Arg Lys Glu
 20 25 30
 Leu Gly Asp Ser Pro Lys Asp Lys Val Pro Phe Ser Val Pro Lys Ile
 35 40 45
 Pro Leu Val Phe Arg Gly His Thr Gln Gln Asp Pro Glu Val Pro Lys
 50 55 60
 Ser Leu Val Ser Asn Leu Arg Ile His Cys Pro Leu Leu Ala Gly Ser
 65 70 75 80
 Ala Leu Ile Thr Phe Asp Asp Pro Lys Val Ala Glu Gln Val Leu Gln
 85 90 95
 Gln Lys Glu His Thr Ile Asn Met Glu Glu Cys Arg Leu Arg Val Gln
 100 105 110
 Val Gln Pro Leu Glu Leu Pro Met Val Thr Thr Ile Gln Val Ser Ser
 115 120 125
 Gln Leu Ser Gly Arg Arg Val Leu Val Thr Gly Phe Pro Ala Ser Leu
 130 135 140
 Arg Leu Ser Glu Glu Glu Leu Leu Asp Lys Leu Glu Ile Phe Phe Gly
 145 150 155 160
 Lys Thr Arg Asn Gly Gly Gly Asp Val Asp Val Arg Glu Leu Leu Pro
 165 170 175
 Gly Ser Val Met Leu Gly Phe Ala Arg Asp Gly Val Ala Gln Arg Leu
 180 185 190
 Cys Gln Ile Gly Gln Phe Thr Val Pro Leu Gly Gly Gln Gln Val Pro
 195 200 205
 Leu Arg Val Ser Pro Tyr Val Asn Gly Glu Ile Gln Lys Ala Glu Ile
 210 215 220
 Arg Ser Gln Pro Val Pro Arg Ser Val Leu Val Leu Asn Ile Pro Asp
 225 230 235 240
 Ile Leu Asp Gly Pro Glu Leu His Asp Val Leu Glu Ile His Phe Gln
 245 250 255
 Lys Pro Thr Arg Gly Gly Gly Glu Val Glu Ala Leu Thr Val Val Pro
 260 265 270
 Gln Gly Gln Gln Gly Leu Ala Val Phe Thr Ser Glu Ser Gly *
 275 280 285 286

<210> 1908
 <211> 135
 <212> PRT
 <213> Homo sapiens

<400> 1908
 Met Met Lys Cys Pro Gln Ala Leu Leu Ala Ile Phe Trp Leu Leu Leu
 1 5 10 15
 Ser Trp Val Ser Ser Glu Asp Lys Val Val Gln Ser Pro Leu Ser Leu
 20 25 30
 Val Val His Glu Gly Asp Thr Val Thr Leu Asn Cys Ser Tyr Glu Val
 35 40 45
 Thr Asn Phe Arg Ser Leu Leu Trp Tyr Lys Gln Glu Lys Lys Ala Pro
 50 55 60

Thr	Phe	Leu	Phe	Met	Leu	Thr	Ser	Ser	Gly	Ile	Glu	Lys	Lys	Ser	Gly
65					70					75					80
Arg	Leu	Ser	Ser	Ile	Leu	Asp	Lys	Lys	Glu	Leu	Ser	Ser	Ile	Leu	Asn
				85					90					95	
Ile	Thr	Ala	Thr	Gln	Thr	Gly	Asp	Ser	Ala	Ile	Tyr	Leu	Cys	Ala	Val
			100				105						110		
Glu	Ala	Gln	Cys	Ser	Leu	Val	Thr	Cys	Ser	Leu	Tyr	Ser	Asn	Ser	Thr
		115					120					125			
Ala	Glu	Ala	Leu	Gln	Leu	*									
130					134										

<210> 1909

<211> 416

<212> PRT

<213> Homo sapiens

<400> 1909

Met	Leu	Trp	Ser	Gly	Cys	Arg	Arg	Phe	Gly	Ala	Arg	Leu	Gly	Cys	Leu
1				5					10					15	
Pro	Gly	Gly	Leu	Arg	Val	Leu	Val	Gln	Thr	Gly	His	Arg	Ser	Leu	Thr
			20					25					30		
Ser	Cys	Ile	Asp	Pro	Ser	Met	Gly	Leu	Asn	Glu	Glu	Gln	Lys	Glu	Phe
		35				40						45			
Gln	Lys	Val	Ala	Phe	Asp	Phe	Ala	Ala	Arg	Glu	Met	Ala	Pro	Asn	Met
		50			55					60					
Ala	Glu	Trp	Asp	Gln	Lys	Glu	Leu	Phe	Pro	Val	Asp	Val	Met	Arg	Lys
65				70					75						80
Ala	Ala	Gln	Leu	Gly	Phe	Gly	Gly	Val	Tyr	Ile	Gln	Thr	Asp	Val	Gly
			85					90						95	
Gly	Ser	Gly	Leu	Ser	Arg	Leu	Asp	Thr	Ser	Val	Ile	Phe	Glu	Ala	Leu
			100				105						110		
Ala	Thr	Gly	Cys	Thr	Ser	Thr	Thr	Ala	Tyr	Ile	Ser	Ile	His	Asn	Met
		115				120						125			
Cys	Ala	Trp	Met	Ile	Asp	Ser	Phe	Gly	Asn	Glu	Glu	Gln	Arg	His	Lys
		130			135					140					
Phe	Cys	Pro	Pro	Leu	Cys	Thr	Met	Glu	Lys	Phe	Ala	Ser	Tyr	Cys	Leu
145				150					155						160
Thr	Glu	Pro	Gly	Ser	Gly	Ser	Asp	Ala	Ala	Ser	Leu	Leu	Thr	Ser	Ala
			165					170						175	
Lys	Lys	Gln	Gly	Asp	His	Tyr	Ile	Leu	Asn	Gly	Ser	Lys	Ala	Phe	Ile
		180					185						190		
Ser	Gly	Ala	Gly	Glu	Ser	Asp	Ile	Tyr	Val	Val	Met	Cys	Arg	Thr	Gly
		195				200						205			
Gly	Pro	Gly	Pro	Lys	Gly	Ile	Ser	Cys	Ile	Val	Val	Glu	Lys	Gly	Thr
		210			215							220			
Pro	Gly	Leu	Ser	Phe	Gly	Lys	Lys	Glu	Lys	Lys	Val	Gly	Trp	Asn	Ser
225				230						235					240
Gln	Pro	Thr	Arg	Ala	Val	Ile	Phe	Glu	Asp	Cys	Ala	Val	Pro	Val	Ala
			245					250						255	
Asn	Arg	Ile	Gly	Ser	Glu	Gly	Gln	Gly	Phe	Leu	Ile	Ala	Val	Arg	Gly
		260				265						270			
Leu	Asn	Gly	Gly	Arg	Ile	Asn	Ile	Ala	Ser	Cys	Ser	Leu	Gly	Ala	Ala
		275				280						285			
His	Ala	Ser	Val	Ile	Leu	Thr	Arg	Asp	His	Leu	Asn	Val	Arg	Lys	Gln
		290				295					300				
Phe	Gly	Glu	Pro	Leu	Ala	Ser	Asn	Gln	Tyr	Leu	Gln	Phe	Thr	Leu	Ala
305				310					315						320
Asp	Met	Ala	Thr	Arg	Leu	Val	Ala	Ala	Arg	Leu	Met	Val	Arg	Asn	Ala
			325					330						335	
Ala	Val	Ala	Leu	Gln	Glu	Glu	Arg	Lys	Asp	Ala	Val	Ala	Leu	Cys	Ser
		340						345					350		

Met Ala Lys Leu Phe Ala Thr Asp Glu Cys Phe Ala Ile Cys Asn Gln
 355 360 365
 Ala Leu Gln Met His Gly Gly Tyr Gly Tyr Leu Lys Asp Tyr Ala Val
 370 375 380
 Gln Gln Tyr Val Arg Asp Ser Arg Val His Gln Ile Leu Glu Gly Ser
 385 390 395 400
 Asn Glu Val Met Arg Ile Leu Ile Ser Arg Ser Leu Leu Gln Glu *
 405 410 415

<210> 1910
 <211> 282
 <212> PRT
 <213> Homo sapiens

<400> 1910
 Met Ser Gln Pro Arg Thr Pro Glu Gln Ala Leu Asp Thr Pro Gly Asp
 1 5 10 15
 Cys Pro Pro Gly Arg Arg Asp Glu Asp Ala Gly Glu Gly Ile Gln Cys
 20 25 30
 Ser Gln Arg Met Leu Ser Phe Ser Asp Ala Leu Leu Ser Ile Ile Ala
 35 40 45
 Thr Val Met Ile Leu Pro Val Thr His Thr Glu Ile Ser Pro Glu Gln
 50 55 60
 Gln Phe Asp Arg Ser Val Gln Arg Leu Leu Ala Thr Arg Ile Ala Val
 65 70 75 80
 Tyr Leu Met Thr Phe Leu Ile Val Thr Val Ala Trp Ala Ala His Thr
 85 90 95
 Arg Leu Phe Gln Val Val Gly Lys Thr Asp Asp Thr Leu Ala Leu Leu
 100 105 110
 Asn Leu Ala Cys Met Lys Thr Ile Thr Phe Leu Pro Tyr Thr Phe Ser
 115 120 125
 Leu Met Val Thr Phe Pro Asp Val Pro Leu Gly Ile Phe Leu Phe Cys
 130 135 140
 Val Cys Val Ile Ala Ile Gly Val Val Gln Ala Leu Ile Val Gly Tyr
 145 150 155 160
 Ala Phe His Phe Pro His Leu Leu Ser Pro Gln Ile Gln Arg Ser Ala
 165 170 175
 His Arg Ala Leu Tyr Arg Arg His Val Leu Gly Ile Val Leu Gln Gly
 180 185 190
 Pro Ala Leu Cys Phe Ala Ala Ala Ile Phe Ser Leu Phe Phe Val Pro
 195 200 205
 Leu Ser Tyr Leu Leu Met Val Thr Val Ile Leu Leu Pro Tyr Val Ser
 210 215 220
 Lys Val Thr Gly Trp Cys Arg Asp Arg Leu Leu Gly His Arg Glu Pro
 225 230 235 240
 Ser Ala His Pro Val Glu Val Phe Ser Phe Asp Leu His Glu Pro Leu
 245 250 255
 Ser Lys Glu Arg Val Glu Ala Phe Ser Asp Gly Val Tyr Ala Ile Val
 260 265 270
 Ala Thr Leu Leu Ile Leu Asp Ile Trp *
 275 280 281

<210> 1911
 <211> 343
 <212> PRT
 <213> Homo sapiens

<400> 1911

Met Gln Ala Val Asp Asn Leu Thr Ser Ala Pro Gly Asn Thr Ser Leu
 1 5 10 15
 Cys Thr Arg Asp Tyr Lys Ile Thr Gln Val Leu Phe Pro Leu Leu Tyr
 20 25 30
 Thr Val Leu Phe Phe Val Gly Leu Ile Thr Asn Gly Leu Ala Met Arg
 35 40 45
 Ile Phe Phe Gln Ile Arg Ser Lys Ser Asn Phe Ile Ile Phe Leu Lys
 50 55 60
 Asn Thr Val Ile Ser Asp Leu Leu Met Ile Leu Thr Phe Pro Phe Lys
 65 70 75 80
 Ile Leu Ser Asp Ala Lys Leu Gly Thr Gly Pro Leu Arg Thr Phe Val
 85 90 95
 Cys Gln Val Thr Ser Val Ile Phe Tyr Phe Thr Met Tyr Ile Ser Ile
 100 105 110
 Ser Phe Leu Gly Leu Ile Thr Ile Asp Arg Tyr Gln Lys Thr Thr Arg
 115 120 125
 Pro Phe Lys Thr Ser Asn Pro Lys Asn Leu Leu Gly Ala Lys Ile Leu
 130 135 140
 Ser Val Val Ile Trp Ala Phe Met Phe Leu Leu Ser Leu Pro Asn Met
 145 150 155 160
 Ile Leu Thr Asn Arg Gln Pro Arg Asp Lys Asn Val Lys Lys Cys Ser
 165 170 175
 Phe Leu Lys Ser Glu Phe Gly Leu Val Trp His Glu Ile Val Asn Tyr
 180 185 190
 Ile Cys Gln Val Ile Phe Trp Ile Asn Phe Leu Ile Val Ile Val Cys
 195 200 205
 Tyr Thr Leu Ile Thr Lys Glu Leu Tyr Arg Ser Tyr Val Arg Thr Arg
 210 215 220
 Gly Val Gly Lys Val Pro Arg Lys Lys Val Asn Val Lys Val Phe Ile
 225 230 235 240
 Ile Ile Ala Val Phe Phe Ile Cys Phe Val Pro Phe His Phe Ala Arg
 245 250 255
 Ile Pro Tyr Thr Leu Ser Gln Thr Arg Asp Val Phe Asp Cys Thr Ala
 260 265 270
 Glu Asn Thr Leu Phe Tyr Val Lys Glu Ser Thr Leu Trp Leu Thr Ser
 275 280 285
 Leu Asn Ala Cys Leu Asp Pro Phe Ile Tyr Phe Phe Leu Cys Lys Ser
 290 295 300
 Phe Arg Asn Ser Leu Ile Ser Met Leu Lys Cys Pro Asn Ser Ala Thr
 305 310 315 320
 Ser Leu Ser Gln Asp Asn Arg Lys Lys Glu Gln Asp Gly Gly Asp Pro
 325 330 335
 Asn Glu Glu Thr Pro Met *
 340 342

<210> 1912

<211> 141

<212> PRT

<213> Homo sapiens

<400> 1912

Met Val His Leu Thr Pro Glu Glu Lys Ser Ala Val Thr Ala Leu Trp
 1 5 10 15
 Gly Lys Val Asn Val Asp Glu Val Gly Gly Glu Ala Leu Gly Arg Leu
 20 25 30
 Leu Val Val Tyr Pro Trp Thr Gln Arg Phe Phe Glu Ser Phe Gly Asp
 35 40 45
 Leu Ser Thr Pro Asp Ala Val Met Gly Asn Pro Lys Val Lys Ala His
 50 55 60
 Gly Lys Lys Val Leu Gly Ala Phe Ser Asp Gly Leu Ala His Leu Asp
 65 70 75 80

Asn	Leu	Lys	Gly	Thr	Phe	Ala	Thr	Leu	Ser	Glu	Leu	His	Cys	Asp	Lys
				85					90					95	
Leu	His	Val	Asp	Pro	Glu	Asn	Phe	Arg	Leu	Leu	Gly	Asn	Val	Leu	Val
			100					105					110		
Cys	Val	Leu	Ala	His	His	Phe	Gly	Lys	Glu	Phe	Thr	Pro	Pro	Val	Ala
		115					120					125			
Gly	Leu	Pro	Ile	Arg	Lys	Leu	Val	Ala	Gly	Cys	Gly	*			
	130					135					140				

<210> 1913

<211> 556

<212> PRT

<213> Homo sapiens

<400> 1913

Met	Pro	Thr	Thr	Val	Asp	Asp	Val	Leu	Glu	His	Gly	Gly	Glu	Phe	His
1				5					10					15	
Phe	Phe	Gln	Lys	Gln	Met	Phe	Phe	Leu	Leu	Ala	Leu	Leu	Ser	Ala	Thr
		20						25					30		
Phe	Ala	Pro	Ile	Tyr	Val	Gly	Ile	Val	Phe	Leu	Gly	Phe	Thr	Pro	Asp
		35					40					45			
His	Arg	Cys	Arg	Ser	Pro	Gly	Val	Ala	Glu	Leu	Ser	Leu	Arg	Cys	Gly
	50					55					60				
Trp	Ser	Pro	Ala	Glu	Glu	Leu	Asn	Tyr	Thr	Val	Pro	Gly	Pro	Gly	Pro
65					70					75					80
Ala	Gly	Glu	Ala	Ser	Pro	Arg	Gln	Cys	Arg	Arg	Tyr	Glu	Val	Asp	Trp
				85					90					95	
Asn	Gln	Ser	Thr	Phe	Asp	Cys	Val	Asp	Pro	Leu	Ala	Ser	Leu	Asp	Thr
			100					105					110		
Asn	Arg	Ser	Arg	Leu	Pro	Leu	Gly	Pro	Cys	Arg	Asp	Gly	Trp	Val	Tyr
		115					120					125			
Glu	Thr	Pro	Gly	Ser	Ser	Ile	Val	Thr	Glu	Phe	Asn	Leu	Val	Cys	Ala
	130					135					140				
Asn	Ser	Trp	Met	Leu	Asp	Leu	Phe	Gln	Ser	Ser	Val	Asn	Val	Gly	Phe
145					150					155					160
Phe	Ile	Gly	Ser	Met	Ser	Ile	Gly	Tyr	Ile	Ala	Asp	Arg	Phe	Gly	Arg
			165					170						175	
Lys	Leu	Cys	Leu	Leu	Thr	Thr	Val	Leu	Ile	Asn	Ala	Ala	Ala	Gly	Val
			180					185						190	
Leu	Met	Ala	Ile	Ser	Pro	Thr	Tyr	Thr	Trp	Met	Leu	Ile	Phe	Arg	Leu
		195					200					205			
Ile	Gln	Gly	Leu	Val	Ser	Lys	Ala	Gly	Trp	Leu	Ile	Gly	Tyr	Ile	Leu
	210					215						220			
Ile	Thr	Glu	Phe	Val	Gly	Arg	Arg	Tyr	Arg	Arg	Thr	Val	Gly	Ile	Phe
225					230					235					240
Tyr	Gln	Val	Ala	Tyr	Thr	Val	Gly	Leu	Leu	Val	Leu	Ala	Gly	Val	Ala
			245					250						255	
Tyr	Ala	Leu	Pro	His	Trp	Arg	Trp	Leu	Gln	Phe	Thr	Val	Ala	Leu	Pro
		260						265					270		
Asn	Phe	Phe	Phe	Leu	Leu	Tyr	Tyr	Trp	Cys	Ile	Pro	Glu	Ser	Pro	Arg
		275					280					285			
Trp	Leu	Ile	Ser	Gln	Asn	Lys	Asn	Ala	Glu	Ala	Met	Arg	Ile	Ile	Lys
	290					295					300				
His	Ile	Ala	Lys	Lys	Asn	Gly	Lys	Ser	Leu	Pro	Ala	Ser	Leu	Gln	Arg
305					310					315					320
Leu	Arg	Leu	Glu	Glu	Glu	Thr	Gly	Lys	Lys	Leu	Asn	Pro	Ser	Phe	Leu
			325					330						335	
Asp	Leu	Val	Arg	Thr	Pro	Gln	Ile	Arg	Lys	His	Thr	Met	Ile	Leu	Met
		340						345					350		
Tyr	Asn	Trp	Phe	Thr	Ser	Ser	Val	Leu	Tyr	Gln	Gly	Leu	Ile	Met	His
	355						360					365			


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Met Gly Leu Ala Gly Asp Asn Ile Tyr Leu Asp Phe Phe Tyr Ser Ala
 370          375          380
Leu Val Glu Phe Pro Ala Ala Phe Met Ile Ile Leu Thr Ile Asp Arg
385          390          395          400
Ile Gly Arg Arg Tyr Pro Trp Ala Ala Ser Asn Met Val Ala Gly Ala
          405          410          415
Ala Cys Leu Ala Ser Val Phe Ile Pro Gly Asp Leu Gln Trp Leu Lys
          420          425          430
Ile Ile Ile Ser Cys Leu Gly Arg Met Gly Ile Thr Met Ala Tyr Glu
          435          440          445
Ile Val Cys Leu Val Asn Ala Glu Leu Tyr Pro Thr Phe Ile Arg Asn
          450          455          460
Leu Gly Val His Ile Cys Ser Ser Met Cys Asp Ile Gly Gly Ile Ile
465          470          475          480
Thr Pro Phe Leu Val Tyr Arg Leu Thr Asn Ile Trp Leu Glu Leu Pro
          485          490          495
Leu Met Val Phe Gly Val Leu Gly Leu Val Ala Gly Gly Leu Val Leu
          500          505          510
Leu Leu Pro Glu Thr Lys Gly Lys Ala Leu Pro Glu Thr Ile Glu Glu
          515          520          525
Ala Glu Asn Met Gln Arg Pro Arg Lys Asn Lys Glu Lys Met Ile Tyr
          530          535          540
Leu Gln Val Gln Lys Leu Asp Ile Pro Leu Asn *
545          550          555

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<210> 1914
 <211> 283
 <212> PRT
 <213> Homo sapiens

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<400> 1914
Met Leu Gly Val Asn Pro Arg Phe Asp Ser Ala Ser Ser Ser Tyr Tyr
 1          5          10          15
Leu Asp Met His Ser Leu Pro His Val Ile Asn Pro Val Glu Ser Arg
          20          25          30
Leu Gly Ser Ser Ala Ala Ser Leu Tyr Pro Val Leu Asn Phe Leu Leu
          35          40          45
Tyr Val Pro Glu Leu Ala His Ser Pro Leu Tyr Ile Gln Asp Lys Asp
          50          55          60
Gly Ala Pro Val Ala Thr Asn Ala Phe His Ser Pro Arg Trp Gly Gly
65          70          75          80
Ile Met Val Tyr Asn Val Asp Ser Lys Thr Tyr Asn Ala Ser Val Leu
          85          90          95
Pro Val Arg Val Glu Val Asp Met Val Arg Val Met Glu Val Phe Leu
          100          105          110
Ala Gln Leu Arg Leu Leu Phe Gly Ile Ala Gln Pro Gln Leu Pro Pro
          115          120          125
Lys Cys Leu Leu Ser Gly Pro Thr Ser Glu Gly Leu Met Thr Trp Glu
          130          135          140
Leu Asp Arg Leu Leu Trp Ala Arg Ser Val Glu Asn Leu Ala Thr Ala
145          150          155          160
Thr Thr Thr Leu Thr Ser Leu Ala Gln Leu Leu Gly Lys Ile Ser Asn
          165          170          175
Ile Val Ile Lys Asp Asp Val Ala Ser Glu Val Tyr Lys Ala Val Ala
          180          185          190
Ala Val Gln Lys Ser Ala Glu Glu Leu Ala Ser Gly His Leu Ala Ser
          195          200          205
Ala Phe Val Ala Ser Gln Glu Ala Val Thr Ser Ser Glu Leu Ala Phe
          210          215          220
Phe Asp Pro Ser Leu Leu His Leu Leu Tyr Phe Pro Asp Asp Gln Lys
225          230          235          240

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Phe Ala Ile Tyr Ile Pro Leu Phe Leu Pro Met Ala Val Pro Ile Leu
 245 250 255
 Leu Ser Leu Val Lys Ile Phe Leu Glu Thr Arg Lys Ser Trp Arg Lys
 260 265 270
 Pro Glu Lys Thr Asp Cys Val Arg Asp Ile *
 275 280 282

<210> 1915

<211> 788

<212> PRT

<213> Homo sapiens

<400> 1915

Met Gly Ser Thr Asp Ser Lys Leu Asn Phe Arg Lys Ala Val Ile Gln
 1 5 10 15
 Leu Thr Thr Lys Thr Gln Pro Val Glu Ala Thr Asp Asp Ala Phe Trp
 20 25 30
 Asp Gln Phe Trp Ala Asp Thr Ala Thr Ser Val Gln Asp Val Phe Ala
 35 40 45
 Leu Val Pro Ala Ala Glu Ile Arg Ala Val Arg Glu Glu Ser Pro Ser
 50 55 60
 Asn Leu Ala Thr Leu Cys Tyr Lys Ala Val Glu Lys Leu Val Gln Gly
 65 70 75 80
 Ala Glu Ser Gly Cys His Ser Glu Lys Glu Lys Gln Ile Val Leu Asn
 85 90 95
 Cys Ser Arg Leu Leu Thr Arg Val Leu Pro Tyr Ile Phe Glu Asp Pro
 100 105 110
 Asp Trp Arg Gly Phe Phe Trp Ser Thr Val Pro Gly Ala Gly Arg Gly
 115 120 125
 Gly Gly Glu Glu Asp Asp Glu His Ala Arg Pro Leu Ala Glu Ser Leu
 130 135 140
 Leu Leu Ala Ile Ala Asp Leu Leu Phe Cys Pro Asp Phe Thr Val Gln
 145 150 155 160
 Ser His Arg Arg Ser Thr Val Asp Ser Ala Glu Asp Val His Ser Leu
 165 170 175
 Asp Ser Cys Glu Tyr Ile Trp Glu Ala Gly Val Gly Phe Ala His Ser
 180 185 190
 Pro Gln Pro Asn Tyr Ile His Asp Met Asn Arg Met Glu Leu Leu Lys
 195 200 205
 Leu Leu Leu Thr Cys Phe Ser Glu Ala Met Tyr Leu Pro Pro Ala Pro
 210 215 220
 Glu Ser Gly Ser Thr Asn Pro Trp Val Gln Phe Phe Cys Ser Thr Glu
 225 230 235 240
 Asn Arg His Ala Leu Pro Leu Phe Thr Ser Leu Leu Asn Thr Val Cys
 245 250 255
 Ala Tyr Asp Pro Val Gly Tyr Gly Ile Pro Tyr Asn His Leu Leu Phe
 260 265 270
 Ser Asp Tyr Arg Glu Pro Leu Val Glu Glu Ala Ala Gln Val Leu Ile
 275 280 285
 Val Thr Leu Asp His Asp Ser Ala Ser Ser Ala Ser Pro Thr Val Asp
 290 295 300
 Gly Thr Thr Thr Gly Thr Ala Met Asp Asp Ala Asp Pro Pro Gly Pro
 305 310 315 320
 Glu Asn Leu Phe Val Asn Tyr Leu Ser Arg Ile His Arg Glu Glu Asp
 325 330 335
 Phe Gln Phe Ile Leu Lys Gly Ile Ala Arg Leu Leu Ser Asn Pro Leu
 340 345 350
 Leu Gln Thr Tyr Leu Pro Asn Ser Thr Lys Lys Ile Gln Phe His Gln
 355 360 365
 Glu Leu Leu Val Leu Phe Trp Lys Leu Cys Asp Phe Asn Lys Lys Phe
 370 375 380

Leu Phe Phe Val Leu Lys Ser Ser Asp Val Leu Asp Ile Leu Val Pro
 385 390 395 400
 Ile Leu Phe Phe Leu Asn Asp Ala Arg Ala Asp Gln Ser Arg Val Gly
 405 410 415
 Leu Met His Ile Gly Val Phe Ile Leu Leu Leu Ser Gly Glu Arg
 420 425 430
 Asn Phe Gly Val Arg Leu Asn Lys Pro Tyr Ser Ile Arg Val Pro Met
 435 440 445
 Asp Ile Pro Val Phe Thr Gly Thr His Ala Asp Leu Leu Ile Val Val
 450 455 460
 Phe His Lys Ile Ile Thr Ser Gly His Gln Arg Leu Gln Pro Leu Phe
 465 470 475 480
 Asp Cys Leu Leu Thr Ile Val Val Asn Val Ser Pro Tyr Leu Lys Ser
 485 490 495
 Leu Ser Met Val Thr Ala Asn Lys Leu Leu His Leu Leu Glu Ala Phe
 500 505 510
 Ser Thr Thr Trp Phe Leu Phe Ser Ala Ala Gln Asn His His Leu Val
 515 520 525
 Phe Phe Leu Leu Glu Val Phe Asn Asn Ile Ile Gln Tyr Gln Phe Asp
 530 535 540
 Gly Asn Ser Asn Leu Val Tyr Ala Ile Ile Arg Lys Arg Ser Ile Phe
 545 550 555 560
 His Gln Leu Ala Asn Leu Pro Thr Asp Pro Pro Thr Ile His Lys Ala
 565 570 575
 Leu Gln Arg Arg Arg Thr Pro Glu Pro Leu Ser Arg Thr Gly Ser
 580 585 590
 Gln Glu Gly Thr Ser Met Glu Gly Ser Arg Pro Ala Ala Pro Ala Glu
 595 600 605
 Pro Gly Thr Leu Lys Thr Ser Leu Val Ala Thr Pro Gly Ile Asp Lys
 610 615 620
 Leu Thr Glu Lys Ser Gln Val Ser Glu Asp Gly Thr Leu Arg Ser Leu
 625 630 635 640
 Glu Pro Glu Pro Gln Gln Ser Leu Glu Asp Gly Ser Pro Ala Lys Gly
 645 650 655
 Glu Pro Ser Gln Ala Trp Arg Glu Gln Arg Arg Pro Ser Thr Ser Ser
 660 665 670
 Ala Ser Gly Gln Trp Ser Pro Thr Pro Glu Trp Val Leu Ser Trp Lys
 675 680 685
 Ser Lys Leu Pro Leu Gln Thr Ile Met Arg Leu Leu Gln Val Leu Val
 690 695 700
 Pro Gln Val Glu Lys Ile Cys Ile Asp Lys Gly Leu Thr Asp Glu Ser
 705 710 715 720
 Glu Ile Leu Arg Phe Leu Gln His Gly Thr Leu Val Gly Leu Leu Pro
 725 730 735
 Val Pro His Pro Ile Leu Ile Arg Lys Tyr Gln Ala Asn Ser Gly Thr
 740 745 750
 Ala Met Trp Phe Arg Thr Tyr Met Trp Gly Val Ile Tyr Leu Arg Asn
 755 760 765
 Val Asp Pro Pro Val Trp Tyr Asp Thr Asp Val Lys Leu Phe Glu Ile
 770 775 780
 Gln Arg Val *
 785 787

<210> 1916

<211> 474

<212> PRT

<213> Homo sapiens

<400> 1916

Met Gln Asn Lys Val Pro Ile Pro Ala Pro Asn Glu Val Leu Asn Asp
 1 5 10 15


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Arg Lys Glu Asp Ile Lys Leu Glu Glu Lys Lys Lys Thr Gln Ala Glu
      20      25      30
Ile Glu Gln Glu Met Ala Thr Leu Gln Tyr Thr Asn Pro Gln Leu Leu
      35      40      45
Glu Gln Leu Lys Ile Glu Arg Leu Ala Gln Lys Gln Val Glu Gln Ile
      50      55      60
Gln Pro Pro Pro Ser Ser Gly Thr Pro Leu Leu Gly Pro Gln Pro Phe
      65      70      75      80
Pro Gly Gln Gly Pro Met Ser Gln Ile Pro Gln Gly Phe Gln Gln Pro
      85      90      95
His Pro Ser Gln Gln Met Pro Met Asn Met Ala Gln Met Gly Pro Pro
      100      105      110
Gly Pro Gln Gly Gln Phe Arg Pro Pro Gly Pro Gln Gly Gln Met Gly
      115      120      125
Pro Gln Gly Pro Pro Leu His Gln Gly Gly Gly Gly Pro Gln Gly Phe
      130      135      140
Met Gly Pro Gln Gly Pro Gln Gly Pro Pro Gln Gly Leu Pro Arg Pro
      145      150      155      160
Gln Asp Met His Gly Pro Gln Gly Met Gln Arg His Pro Gly Pro His
      165      170      175
Gly Pro Leu Gly Pro Gln Gly Pro Pro Gly Pro Gln Gly Ser Ser Gly
      180      185      190
Pro Gln Gly His Met Gly Pro Gln Gly Pro Pro Gly Pro Gln Gly His
      195      200      205
Ile Gly Pro Gln Gly Pro Pro Gly Pro Gln Gly His Leu Gly Pro Gln
      210      215      220
Gly Pro Pro Gly Thr Gln Gly Met Gln Gly Pro Pro Gly Pro Arg Gly
      225      230      235      240
Met Gln Gly Pro Pro His Pro His Gly Ile Gln Gly Gly Pro Gly Ser
      245      250      255
Gln Gly Ile Gln Gly Pro Val Ser Gln Gly Pro Leu Met Gly Leu Asn
      260      265      270
Pro Arg Gly Met Gln Gly Pro Pro Gly Pro Arg Glu Asn Gln Gly Pro
      275      280      285
Ala Pro Gln Gly Met Ile Met Gly His Pro Pro Gln Glu Met Arg Gly
      290      295      300
Pro His Pro Pro Gly Gly Leu Leu Gly His Gly Pro Gln Glu Met Arg
      305      310      315      320
Gly Pro Gln Glu Ile Arg Gly Met Gln Gly Pro Pro Pro Gln Gly Ser
      325      330      335
Met Leu Gly Pro Pro Gln Glu Leu Arg Gly Pro Pro Gly Ser Gln Ser
      340      345      350
Gln Gln Gly Pro Pro Gln Gly Ser Leu Gly Pro Pro Pro Gln Gly Gly
      355      360      365
Met Gln Gly Pro Pro Gly Pro Gln Gly Gln Gln Asn Pro Ala Arg Gly
      370      375      380
Pro His Pro Ser Gln Gly Pro Ile Pro Phe Gln Gln Gln Lys Thr Pro
      385      390      395      400
Leu Leu Gly Asp Gly Pro Arg Ala Pro Phe Asn Gln Glu Gly Gln Ser
      405      410      415
Thr Gly Pro Pro Pro Leu Ile Pro Gly Leu Gly Gln Gln Gly Ala Gln
      420      425      430
Gly Arg Ile Pro Pro Leu Asn Pro Gly Gln Gly Pro Gly Pro Asn Lys
      435      440      445
Val Ser Glu Glu Glu Pro Arg Arg Gly Met Arg Ala Val Leu Pro Pro
      450      455      460
Glu Glu Gly Met Val Phe Leu Val Leu *
      465      470      473

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<210> 1917
 <211> 306
 <212> PRT

<213> Homo sapiens

<400> 1917

```

Met Tyr Asn Met Met Glu Thr Glu Leu Lys Pro Pro Gly Pro Gln Gln
 1      5      10      15
Thr Ser Gly Gly Gly Gly Gly Asn Ser Thr Ala Ala Ala Ala Gly Gly
 20      25      30
Asn Gln Lys Asn Ser Pro Asp Arg Val Lys Arg Pro Met Asn Ala Phe
 35      40      45
Met Val Trp Ser Arg Gly Gln Arg Arg Lys Met Ala Gln Glu Asn Pro
 50      55      60
Lys Met His Asn Ser Glu Ile Ser Lys Arg Leu Gly Ala Glu Trp Lys
 65      70      75      80
Leu Leu Ser Glu Thr Glu Lys Arg Pro Phe Ile Asp Glu Ala Lys Arg
 85      90      95
Leu Arg Ala Leu His Met Lys Glu His Pro Asp Tyr Lys Tyr Arg Pro
 100     105     110
Arg Arg Lys Thr Lys Thr Leu Met Lys Lys Asp Lys Tyr Thr Leu Pro
 115     120     125
Gly Gly Leu Leu Ala Pro Gly Gly Asn Ser Met Ala Ser Gly Val Gly
 130     135     140
Val Gly Ala Gly Leu Gly Ala Gly Val Asn Gln Arg Met Asp Ser Tyr
 145     150     155     160
Ala His Met Asn Gly Trp Ser Asn Gly Ser Tyr Ser Met Met Gln Asp
 165     170     175
Gln Leu Gly Tyr Pro Gln His Pro Gly Leu Asn Ala His Gly Ala Ala
 180     185     190
Gln Met Gln Pro Met His Arg Tyr Asp Val Ser Ala Leu Gln Tyr Asn
 195     200     205
Ser Met Thr Ser Met Ser Tyr Ser Gln Gln Gly Thr Pro Gly Met Ala
 210     215     220
Leu Gly Ser Met Gly Ser Val Val Lys Ser Glu Ala Ser Ser Ser Pro
 225     230     235     240
Pro Val Val Thr Ser Ser Ser His Ser Arg Ala Pro Cys Gln Ala Gly
 245     250     255
Asp Leu Arg Asp Met Ile Ser Met Tyr Leu Pro Gly Ala Glu Val Pro
 260     265     270
Glu Pro Ala Ala Pro Ser Arg Leu His Met Ser Gln His Tyr Gln Ser
 275     280     285
Gly Pro Val Pro Gly Thr Ala Ile Asn Gly Thr Leu Pro Leu Ser His
 290     295     300
Met *
305

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<210> 1918

<211> 616

<212> PRT

<213> Homo sapiens

<400> 1918

```

Met Glu Thr Thr Leu Ala Ile Ser Thr Thr Thr Pro Gly Leu Ser Ala
 1      5      10      15
Lys Gly Gly Ile Leu Tyr Ser Ser Ser Arg Ser Pro Glu Glu Thr Leu
 20      25      30
Ser Pro Ala Ser Met Arg Ser Ser Ser Ile Ser Gly Glu Pro Thr Ser
 35      40      45
Leu Tyr Ser Gln Ala Glu Ser Thr His Thr Thr Ala Phe Pro Ala Ser
 50      55      60
Thr Thr Thr Ser Gly Leu Ser Gln Glu Ser Thr Thr Phe His Ser Lys
 65      70      75      80

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Pro Gly Ser Thr Glu Thr Thr Leu Ser	Pro Gly Ser Ile Thr Thr Ser
85	90 95
Ser Phe Ala Gln Glu Phe Thr Thr Pro His Ser Gln Pro Gly Ser Ala	
100	105 110
Leu Ser Thr Val Ser Pro Ala Ser Thr Thr Val Pro Gly Leu Ser Glu	
115	120 125
Glu Ser Thr Thr Phe Tyr Ser Ser Pro Gly Ser Thr Glu Thr Thr Ala	
130	135 140
Phe Ser His Ser Asn Thr Met Ser Ile His Ser Gln Gln Ser Thr Pro	
145	150 155 160
Phe Pro Asp Ser Pro Gly Phe Thr His Thr Val Leu Pro Ala Thr Leu	
165	170 175
Thr Thr Thr Asp Ile Gly Gln Glu Ser Thr Ala Phe His Ser Ser Ser	
180	185 190
Asp Ala Thr Gly Thr Thr Pro Leu Pro Ala Arg Ser Thr Ala Ser Asp	
195	200 205
Leu Val Gly Glu Pro Thr Thr Phe Tyr Ile Ser Pro Ser Pro Thr Tyr	
210	215 220
Thr Thr Leu Phe Pro Ala Ser Ser Ser Thr Ser Gly Leu Thr Glu Glu	
225	230 235 240
Ser Thr Thr Phe His Thr Ser Pro Ser Phe Thr Ser Thr Ile Val Ser	
245	250 255
Thr Glu Ser Leu Glu Thr Leu Ala Pro Gly Leu Cys Gln Glu Gly Gln	
260	265 270
Ile Trp Asn Gly Lys Gln Cys Val Cys Pro Gln Gly Tyr Val Gly Tyr	
275	280 285
Gln Cys Leu Ser Pro Leu Glu Ser Phe Pro Val Glu Thr Pro Glu Lys	
290	295 300
Leu Asn Ala Thr Leu Gly Met Thr Val Lys Val Thr Tyr Arg Asn Phe	
305	310 315 320
Thr Glu Lys Met Asn Asp Ala Ser Ser Gln Glu Tyr Gln Asn Phe Ser	
325	330 335
Thr Leu Phe Lys Asn Arg Met Asp Val Val Leu Lys Gly Asp Asn Leu	
340	345 350
Pro Gln Tyr Arg Gly Val Asn Ile Arg Arg Leu Leu Asn Gly Ser Ile	
355	360 365
Val Val Lys Asn Asp Val Ile Leu Glu Ala Asp Tyr Thr Leu Glu Tyr	
370	375 380
Glu Glu Leu Phe Glu Asn Leu Ala Glu Ile Val Lys Ala Lys Ile Met	
385	390 395 400
Asn Glu Thr Arg Thr Thr Leu Leu Asp Pro Asp Ser Cys Arg Lys Ala	
405	410 415
Ile Leu Cys Tyr Ser Glu Glu Asp Thr Phe Val Asp Ser Ser Val Thr	
420	425 430
Pro Gly Phe Asp Phe Gln Glu Gln Cys Thr Gln Lys Ala Ala Glu Gly	
435	440 445
Tyr Thr Gln Phe Tyr Tyr Val Asp Val Leu Asp Gly Lys Leu Ala Cys	
450	455 460
Val Asn Lys Cys Thr Lys Gly Thr Lys Ser Gln Met Asn Cys Asn Leu	
465	470 475 480
Gly Thr Cys Gln Leu Gln Arg Ser Gly Pro Arg Cys Leu Cys Pro Asn	
485	490 495
Thr Asn Thr His Trp Tyr Trp Gly Glu Thr Cys Glu Phe Asn Ile Ala	
500	505 510
Lys Ser Leu Val Tyr Gly Ile Val Gly Ala Val Met Ala Val Leu Leu	
515	520 525
Leu Ala Leu Ile Ile Leu Ile Ile Leu Phe Ser Leu Ser Gln Arg Lys	
530	535 540
Arg His Arg Glu Gln Tyr Asp Val Pro Gln Glu Trp Arg Lys Glu Gly	
545	550 555 560
Thr Pro Gly Ile Phe Gln Lys Thr Ala Ile Trp Glu Asp Gln Asn Leu	
565	570 575
Arg Glu Ser Arg Phe Gly Leu Glu Asn Ala Tyr Asn Asn Phe Arg Pro	
580	585 590

Thr Leu Glu Thr Val Asp Ser Gly Thr Glu Leu His Ile Gln Arg Pro
 595 600 605
 Glu Met Val Ala Ser Pro Val *
 610 615

<210> 1919
 <211> 255
 <212> PRT
 <213> Homo sapiens

<400> 1919
 Met Ala Glu Gln Glu Ala Gln Pro Arg Pro Ser Leu Thr Thr Ala His
 1 5 10 15
 Ala Lys Lys Gln Gly Pro Pro His Ser Arg Glu Pro Arg Ala Glu Ser
 20 25 30
 Arg Leu Glu Asp Pro Gly Met Asp Ser Arg Glu Ala Gly Leu Thr Pro
 35 40 45
 Ser Pro Gly Asp Pro Met Ala Gly Gly Gly Pro Gln Ala Asn Pro Asp
 50 55 60
 Tyr Leu Phe His Val Ile Phe Leu Gly Asp Ser Asn Val Gly Lys Thr
 65 70 75 80
 Ser Phe Leu His Leu Leu His Gln Asn Ser Phe Ala Thr Gly Leu Thr
 85 90 95
 Ala Thr Val Gly Val Asp Phe Arg Val Lys Thr Leu Leu Val Asp Asn
 100 105 110
 Lys Cys Phe Val Leu Gln Leu Trp Asp Thr Ala Gly Gln Glu Arg Tyr
 115 120 125
 His Ser Met Thr Arg Gln Leu Leu Arg Lys Ala Asp Gly Val Val Leu
 130 135 140
 Met Tyr Asp Ile Thr Ser Gln Glu Ser Phe Ala His Val Arg Tyr Trp
 145 150 155 160
 Leu Asp Cys Leu Gln Asp Ala Gly Ser Asp Gly Val Val Ile Leu Leu
 165 170 175
 Leu Gly Asn Lys Met Asp Cys Glu Glu Glu Arg Gln Val Ser Val Glu
 180 185 190
 Ala Gly Gln Gln Leu Ala Gln Glu Leu Gly Val Tyr Phe Gly Glu Cys
 195 200 205
 Ser Ala Ala Leu Gly His Asn Ile Leu Glu Pro Val Val Asn Leu Ala
 210 215 220
 Arg Ser Leu Arg Met Gln Glu Glu Gly Leu Lys Gly Ser Leu Val Lys
 225 230 235 240
 Val Ala Pro Lys Arg Pro Pro Lys Arg Phe Gly Cys Cys Ser *
 245 250 254

<210> 1920
 <211> 952
 <212> PRT
 <213> Homo sapiens

<400> 1920
 Met Ser Lys Ser Lys Ser Asp Asn Gln Ile Ser Asp Arg Ala Ala Leu
 1 5 10 15
 Glu Ala Lys Val Lys Asp Leu Leu Thr Leu Ala Lys Thr Lys Asp Val
 20 25 30
 Glu Ile Leu His Leu Arg Asn Glu Leu Arg Asp Met Arg Ala Gln Leu
 35 40 45
 Gly Ile Asn Glu Asp His Ser Glu Gly Asp Glu Lys Ser Glu Lys Glu
 50 55 60

Thr	Ile	Met	Ala	His	Gln	Pro	Thr	Asp	Val	Glu	Ser	Thr	Leu	Leu	Gln
65					70					75					80
Leu	Gln	Glu	Gln	Asn	Thr	Ala	Ile	Arg	Glu	Glu	Leu	Asn	Gln	Leu	Lys
				85					90						95
Asn	Glu	Asn	Arg	Met	Leu	Lys	Asp	Arg	Leu	Asn	Ala	Leu	Gly	Phe	Ser
			100					105					110		
Leu	Glu	Gln	Arg	Leu	Asp	Asn	Ser	Glu	Lys	Leu	Phe	Gly	Tyr	Gln	Ser
		115					120					125			
Leu	Ser	Pro	Glu	Ile	Thr	Pro	Gly	Asn	Gln	Ser	Asp	Gly	Gly	Gly	Thr
	130					135					140				
Leu	Thr	Ser	Ser	Val	Glu	Gly	Ser	Ala	Pro	Gly	Ser	Val	Glu	Asp	Leu
145					150					155					160
Leu	Ser	Gln	Asp	Glu	Asn	Thr	Leu	Met	Asp	His	Gln	His	Ser	Asn	Ser
			165						170					175	
Met	Asp	Asn	Leu	Asp	Ser	Glu	Cys	Ser	Glu	Val	Tyr	Gln	Pro	Leu	Thr
			180					185					190		
Ser	Ser	Asp	Asp	Ala	Leu	Asp	Ala	Pro	Ser	Ser	Ser	Glu	Ser	Glu	Gly
		195					200					205			
Ile	Pro	Ser	Ile	Glu	Arg	Ser	Arg	Lys	Gly	Ser	Ser	Gly	Asn	Ala	Ser
	210					215						220			
Glu	Val	Ser	Val	Ala	Cys	Leu	Thr	Glu	Arg	Ile	His	Gln	Met	Glu	Glu
225					230					235					240
Asn	Gln	His	Ser	Thr	Ser	Glu	Glu	Leu	Gln	Ala	Thr	Leu	Gln	Glu	Leu
				245					250					255	
Ala	Asp	Leu	Gln	Gln	Ile	Thr	Gln	Glu	Leu	Asn	Ser	Glu	Asn	Glu	Arg
			260					265					270		
Leu	Gly	Glu	Glu	Lys	Val	Ile	Leu	Met	Glu	Ser	Leu	Cys	Gln	Gln	Ser
	275						280					285			
Asp	Lys	Leu	Glu	His	Phe	Ser	Arg	Gln	Ile	Glu	Tyr	Phe	Arg	Ser	Leu
	290					295					300				
Leu	Asp	Glu	His	His	Ile	Ser	Tyr	Val	Ile	Asp	Glu	Asp	Val	Lys	Ser
305					310					315					320
Gly	Arg	Tyr	Met	Glu	Leu	Glu	Gln	Arg	Tyr	Met	Asp	Leu	Ala	Glu	Asn
			325					330						335	
Ala	Arg	Phe	Glu	Arg	Glu	Gln	Leu	Leu	Gly	Val	Gln	Gln	His	Leu	Ser
			340					345					350		
Asn	Thr	Leu	Lys	Met	Ala	Glu	Gln	Asp	Asn	Lys	Glu	Ala	Gln	Glu	Met
	355						360						365		
Ile	Gly	Ala	Leu	Lys	Glu	Arg	Ser	His	His	Met	Glu	Arg	Ile	Ile	Glu
	370					375					380				
Ser	Glu	Gln	Lys	Gly	Lys	Ala	Ala	Leu	Ala	Ala	Thr	Leu	Glu	Glu	Tyr
385					390					395					400
Lys	Ala	Thr	Val	Ala	Ser	Asp	Gln	Ile	Glu	Met	Asn	Arg	Leu	Lys	Ala
			405						410					415	
Gln	Leu	Glu	Asn	Glu	Lys	Gln	Lys	Val	Ala	Glu	Leu	Tyr	Ser	Ile	His
			420					425					430		
Asn	Ser	Gly	Asp	Lys	Ser	Asp	Ile	Gln	Asp	Leu	Leu	Glu	Ser	Val	Arg
	435						440					445			
Leu	Asp	Lys	Glu	Lys	Ala	Glu	Thr	Leu	Ala	Ser	Ser	Leu	Gln	Glu	Asp
	450					455					460				
Leu	Ala	His	Thr	Arg	Asn	Asp	Ala	Asn	Arg	Leu	Gln	Asp	Ala	Ile	Ala
465					470					475					480
Lys	Val	Glu	Asp	Glu	Tyr	Arg	Ala	Phe	Gln	Glu	Glu	Ala	Lys	Lys	Gln
			485					490						495	
Ile	Glu	Asp	Leu	Asn	Met	Thr	Leu	Glu	Lys	Leu	Arg	Ser	Asp	Leu	Asp
		500						505					510		
Glu	Lys	Glu	Thr	Glu	Arg	Ser	Asp	Met	Lys	Glu	Thr	Ile	Phe	Glu	Leu
	515						520					525			
Glu	Asp	Glu	Val	Glu	Gln	His	Arg	Ala	Val	Lys	Leu	His	Asp	Asn	Leu
	530					535					540				
Ile	Ile	Ser	Asp	Leu	Glu	Asn	Thr	Val	Lys	Lys	Leu	Gln	Asp	Gln	Lys
545					550					555					560
His	Asp	Met	Glu	Arg	Glu	Ile	Lys	Thr	Leu	His	Arg	Arg	Leu	Arg	Glu
			565						570					575	

Glu Ser Ala Glu Trp Arg Gln Phe Gln Ala Asp Leu Gln Thr Ala Val
 580 585 590
 Val Ile Ala Asn Asp Ile Lys Ser Glu Ala Gln Glu Glu Ile Gly Asp
 595 600 605
 Leu Lys Arg Arg Leu His Glu Ala Gln Glu Lys Asn Glu Lys Leu Thr
 610 615 620
 Lys Glu Leu Glu Glu Ile Lys Ser Arg Lys Gln Glu Glu Glu Arg Gly
 625 630 635 640
 Arg Val Tyr Asn Tyr Met Asn Ala Val Glu Arg Asp Leu Ala Ala Leu
 645 650 655
 Arg Gln Gly Met Gly Leu Ser Arg Arg Ser Ser Thr Ser Ser Glu Pro
 660 665 670
 Thr Pro Thr Val Lys Thr Leu Ile Lys Ser Phe Asp Ser Ala Ser Gln
 675 680 685
 Val Pro Asn Pro Ala Ala Ala Ala Ile Pro Arg Thr Pro Leu Ser Pro
 690 695 700
 Ser Pro Met Lys Thr Pro Pro Ala Ala Ala Val Ser Pro Met Gln Arg
 705 710 715 720
 His Ser Ile Ser Gly Pro Ile Ser Thr Ser Lys Pro Leu Thr Ala Leu
 725 730 735
 Ser Asp Lys Arg Pro Asn Tyr Gly Glu Ile Pro Val Gln Glu His Leu
 740 745 750
 Leu Arg Thr Ser Ser Ala Ser Arg Pro Ala Ser Leu Pro Arg Val Pro
 755 760 765
 Ala Met Glu Ser Ala Lys Thr Leu Ser Val Ser Arg Arg Ser Ser Glu
 770 775 780
 Glu Met Lys Arg Asp Ile Ser Ala Gln Glu Gly Ala Ser Pro Ala Ser
 785 790 795 800
 Leu Met Ala Met Gly Thr Thr Ser Pro Gln Leu Ser Leu Ser Ser Ser
 805 810 815
 Pro Thr Ala Ser Val Thr Pro Thr Thr Arg Ser Arg Ile Arg Glu Glu
 820 825 830
 Arg Lys Asp Pro Leu Ser Ala Leu Ala Arg Glu Tyr Gly Gly Ser Lys
 835 840 845
 Arg Asn Ala Leu Leu Lys Trp Cys Gln Lys Lys Thr Glu Gly Tyr Gln
 850 855 860
 Asn Ile Asp Ile Thr Asn Phe Ser Ser Ser Trp Asn Asp Gly Leu Ala
 865 870 875 880
 Phe Cys Ala Leu Leu His Thr Tyr Leu Pro Ala His Ile Pro Tyr Gln
 885 890 895
 Glu Leu Asn Ser Gln Asp Lys Arg Arg Asn Phe Met Leu Ala Phe Gln
 900 905 910
 Ala Ala Glu Ser Val Gly Ile Lys Ser Thr Leu Asp Ile Asn Glu Met
 915 920 925
 Val Arg Thr Glu Arg Pro Asp Trp Gln Asn Val Met Leu Tyr Val Thr
 930 935 940
 Ala Ile Tyr Lys Tyr Phe Glu Thr
 945 950 952

<210> 1921

<211> 767

<212> PRT

<213> Homo sapiens

<400> 1921

Met Phe Leu Pro Glu Asp Lys Ser Tyr Asn Gly Gly Gly Ile Gly Ser
 1 5 10 15
 Ser Asn Arg Ile Met Asp Phe Leu Glu Glu Pro Ile Pro Gly Val Gly
 20 25 30
 Thr Tyr Asp Asp Phe Asn Thr Ile Asp Trp Val Arg Glu Lys Ser Arg
 35 40 45

Asp	Arg	Asp	Arg	His	Arg	Glu	Ile	Thr	Asn	Lys	Ser	Lys	Glu	Ser	Thr
50						55					60				
Trp	Ala	Leu	Ile	His	Ser	Val	Ser	Asp	Ala	Phe	Ser	Gly	Trp	Leu	Leu
65					70					75					80
Met	Leu	Leu	Ile	Gly	Leu	Leu	Ser	Gly	Ser	Leu	Ala	Gly	Leu	Ile	Asp
				85					90					95	
Ile	Ser	Ala	His	Trp	Met	Thr	Asp	Leu	Lys	Glu	Gly	Ile	Cys	Thr	Gly
		100					105						110		
Gly	Phe	Trp	Phe	Asn	His	Glu	His	Cys	Cys	Trp	Asn	Ser	Glu	His	Val
	115					120						125			
Thr	Phe	Glu	Glu	Arg	Asp	Lys	Cys	Pro	Glu	Trp	Asn	Ser	Trp	Ser	Gln
130						135					140				
Leu	Ile	Ile	Ser	Thr	Asp	Glu	Gly	Ala	Phe	Ala	Tyr	Ile	Val	Asn	Tyr
145					150					155					160
Phe	Met	Tyr	Val	Leu	Trp	Ala	Leu	Leu	Phe	Ala	Phe	Leu	Ala	Val	Ser
				165					170					175	
Leu	Val	Lys	Val	Phe	Ala	Pro	Tyr	Ala	Cys	Gly	Ser	Gly	Ile	Pro	Glu
			180						185				190		
Ile	Lys	Thr	Ile	Leu	Ser	Gly	Phe	Ile	Ile	Arg	Gly	Tyr	Leu	Gly	Lys
	195					200						205			
Trp	Thr	Leu	Val	Ile	Lys	Thr	Ile	Thr	Leu	Val	Leu	Ala	Val	Ser	Ser
210						215					220				
Gly	Leu	Ser	Leu	Gly	Lys	Glu	Gly	Pro	Leu	Val	His	Val	Ala	Cys	Cys
225					230						235				240
Cys	Gly	Asn	Ile	Leu	Cys	His	Cys	Phe	Asn	Lys	Tyr	Arg	Lys	Asn	Glu
				245					250					255	
Ala	Lys	Arg	Arg	Glu	Val	Leu	Ser	Ala	Ala	Ala	Ala	Ala	Gly	Val	Ser
			260					265					270		
Val	Ala	Phe	Gly	Ala	Pro	Ile	Gly	Gly	Val	Leu	Phe	Ser	Leu	Glu	Glu
	275					280						285			
Val	Ser	Tyr	Tyr	Phe	Pro	Leu	Lys	Thr	Leu	Trp	Arg	Ser	Phe	Phe	Ala
290						295					300				
Ala	Leu	Val	Ala	Ala	Phe	Thr	Leu	Arg	Ser	Ile	Asn	Pro	Phe	Gly	Asn
305					310					315					320
Ser	Arg	Leu	Val	Leu	Phe	Tyr	Val	Glu	Phe	His	Thr	Pro	Trp	His	Leu
				325					330					335	
Phe	Glu	Leu	Val	Pro	Phe	Ile	Leu	Leu	Gly	Ile	Phe	Gly	Gly	Leu	Trp
			340						345				350		
Gly	Ala	Leu	Phe	Ile	Arg	Thr	Asn	Ile	Ala	Trp	Cys	Arg	Lys	Arg	Lys
	355					360						365			
Thr	Thr	Gln	Leu	Gly	Lys	Tyr	Pro	Val	Ile	Glu	Val	Leu	Val	Val	Thr
370						375					380				
Ala	Ile	Thr	Ala	Ile	Leu	Ala	Phe	Pro	Asn	Glu	Tyr	Thr	Arg	Met	Ser
385					390					395					400
Thr	Ser	Glu	Leu	Ile	Ser	Glu	Leu	Phe	Asn	Asp	Cys	Gly	Leu	Leu	Asp
				405					410					415	
Ser	Ser	Lys	Leu	Cys	Asp	Tyr	Glu	Asn	Arg	Phe	Asn	Thr	Ser	Lys	Gly
			420					425					430		
Gly	Glu	Leu	Pro	Asp	Arg	Pro	Ala	Gly	Val	Gly	Val	Tyr	Ser	Ala	Met
	435					440						445			
Trp	Gln	Leu	Ala	Leu	Thr	Leu	Ile	Leu	Lys	Ile	Val	Ile	Thr	Ile	Phe
450						455					460				
Thr	Phe	Gly	Met	Lys	Ile	Pro	Ser	Gly	Leu	Phe	Ile	Pro	Ser	Met	Ala
465					470					475					480
Val	Gly	Ala	Ile	Ala	Gly	Arg	Leu	Leu	Gly	Val	Gly	Met	Glu	Gln	Leu
				485					490					495	
Ala	Tyr	Tyr	His	Gln	Glu	Trp	Thr	Val	Phe	Asn	Ser	Trp	Cys	Ser	Gln
			500					505					510		
Gly	Ala	Asp	Cys	Ile	Thr	Pro	Gly	Leu	Tyr	Ala	Met	Val	Gly	Ala	Ala
	515					520						525			
Ala	Cys	Leu	Gly	Gly	Val	Thr	Arg	Met	Thr	Val	Ser	Leu	Val	Val	Ile
530						535					540				
Met	Phe	Glu	Leu	Thr	Gly	Gly	Leu	Glu	Tyr	Ile	Val	Pro	Leu	Met	Ala
545					550					555					560

Ala	Ala	Met	Thr	Ser	Lys	Trp	Val	Ala	Asp	Ala	Leu	Gly	Arg	Glu	Gly
				565					570					575	
Ile	Tyr	Asp	Ala	His	Ile	Arg	Leu	Asn	Gly	Tyr	Pro	Phe	Leu	Glu	Ala
			580					585					590		
Lys	Glu	Glu	Phe	Ala	His	Lys	Thr	Leu	Ala	Met	Asp	Val	Met	Lys	Pro
			595				600					605			
Arg	Arg	Asn	Asp	Pro	Leu	Leu	Thr	Val	Leu	Thr	Gln	Asp	Ser	Met	Thr
			610			615					620				
Val	Glu	Asp	Val	Glu	Thr	Ile	Ile	Ser	Glu	Thr	Thr	Tyr	Ser	Gly	Phe
					630					635				640	
Pro	Val	Val	Val	Ser	Arg	Glu	Ser	Gln	Arg	Leu	Val	Gly	Phe	Val	Leu
				645					650					655	
Arg	Arg	Asp	Leu	Ile	Ile	Ser	Ile	Glu	Asn	Ala	Arg	Lys	Lys	Gln	Asp
			660					665					670		
Gly	Val	Val	Ser	Thr	Ser	Ile	Ile	Tyr	Phe	Thr	Glu	His	Ser	Pro	Pro
			675				680					685			
Leu	Pro	Pro	Tyr	Thr	Pro	Pro	Thr	Leu	Lys	Leu	Arg	Asn	Ile	Leu	Asp
			690			695					700				
Leu	Ser	Pro	Phe	Thr	Val	Thr	Asp	Leu	Thr	Pro	Met	Glu	Ile	Val	Val
					710					715				720	
Asp	Ile	Phe	Arg	Lys	Leu	Gly	Leu	Arg	Gln	Cys	Leu	Val	Thr	His	Asn
				725					730					735	
Gly	Arg	Leu	Leu	Gly	Ile	Ile	Thr	Lys	Lys	Asp	Val	Leu	Lys	His	Ile
			740					745					750		
Ala	Gln	Met	Ala	Asn	Gln	Asp	Pro	Asp	Ser	Ile	Leu	Phe	Asn	*	
			755				760					765	766		

<210> 1922

<211> 344

<212> PRT

<213> Homo sapiens

<400> 1922

Met	Ser	Arg	Ala	Gly	Ser	Trp	Asp	Met	Asp	Gly	Leu	Arg	Ala	Asp	Gly
1				5					10					15	
Gly	Gly	Ala	Gly	Gly	Ala	Pro	Ala	Ser	Ser	Ser	Ser	Ser	Ser	Val	Ala
			20					25					30		
Ala	Ala	Ala	Ala	Ser	Gly	Gln	Cys	Arg	Gly	Phe	Leu	Ser	Ala	Pro	Val
			35				40					45			
Phe	Ala	Gly	Thr	His	Ser	Gly	Arg	Ala	Ala	Ala	Ala	Ala	Ala	Ala	Ala
			50			55					60				
Ala	Ala	Ala	Ala	Ala	Ala	Ala	Ser	Gly	Phe	Ala	Tyr	Pro	Gly	Thr	Ser
			65			70				75				80	
Glu	Arg	Thr	Gly	Ser	Ser	Ser	Ser	Ser	Ser	Ser	Ser	Ala	Val	Val	Ala
				85				90					95		
Ala	Arg	Pro	Glu	Ala	Pro	Pro	Ala	Lys	Glu	Cys	Pro	Ala	Pro	Thr	Pro
			100					105					110		
Ala	Ala	Ala	Ala	Ala	Ala	Pro	Pro	Ser	Ala	Pro	Ala	Leu	Gly	Tyr	Gly
			115				120					125			
Tyr	His	Phe	Gly	Asn	Gly	Tyr	Tyr	Ser	Cys	Arg	Met	Ser	His	Gly	Val
			130			135					140				
Gly	Leu	Gln	Gln	Asn	Ala	Leu	Lys	Ser	Ser	Pro	His	Ala	Ser	Leu	Gly
				150						155				160	
Gly	Phe	Pro	Val	Glu	Lys	Tyr	Met	Asp	Val	Ser	Gly	Leu	Ala	Ser	Ser
				165					170					175	
Ser	Val	Pro	Ala	Asn	Glu	Val	Pro	Ala	Arg	Ala	Lys	Glu	Val	Ser	Phe
			180					185					190		
Tyr	Gln	Gly	Tyr	Thr	Ser	Pro	Tyr	Gln	His	Val	Pro	Gly	Tyr	Ile	Asp
			195				200					205			
Met	Val	Ser	Thr	Phe	Gly	Ser	Gly	Glu	Pro	Arg	His	Glu	Ala	Tyr	Ile
			210			215					220				

Ser Met Glu Gly Tyr Gln Ser Trp Thr Leu Ala Asn Gly Trp Asn Ser
 225 230 235 240
 Gln Val Tyr Cys Thr Lys Asp Gln Pro Gln Gly Ser His Phe Trp Lys
 245 250 255
 Ser Ser Phe Pro Gly Asp Val Ala Leu Asn Gln Pro Asp Met Cys Val
 260 265 270
 Tyr Arg Arg Gly Arg Lys Lys Arg Val Pro Tyr Thr Lys Leu Gln Leu
 275 280 285
 Lys Glu Leu Glu Asn Glu Tyr Ala Ile Asn Lys Phe Ile Asn Lys Asp
 290 295 300
 Lys Arg Arg Arg Ile Ser Ala Ala Thr Asn Leu Ser Glu Arg Gln Val
 305 310 315 320
 Thr Ile Trp Phe Gln Asn Arg Arg Val Lys Asp Lys Lys Ile Val Ser
 325 330 335
 Lys Leu Lys Asp Thr Val Ser *
 340 343

<210> 1923

<211> 952

<212> PRT

<213> Homo sapiens

<400> 1923

Met Ala Asp Leu Ser Leu Leu Gln Glu Asp Leu Gln Glu Asp Ala Asp
 1 5 10 15
 Gly Phe Gly Val Asp Asp Tyr Ser Ser Glu Ser Asp Val Ile Ile Ile
 20 25 30
 Pro Ser Ala Leu Asp Phe Val Ser Gln Asp Glu Met Leu Thr Pro Leu
 35 40 45
 Gly Arg Leu Asp Lys Tyr Ala Ala Ser Glu Asn Ile Phe Asn Gln Thr
 50 55 60
 Lys Trp Trp Pro Arg Ser Leu Leu Asp Thr Leu Arg Glu Val Cys Asp
 65 70 75 80
 Asp Glu Arg Asp Cys Ile Ala Val Leu Glu Arg Ile Ser Arg Leu Ala
 85 90 95
 Asp Asp Ser Glu Pro Thr Val Arg Ala Glu Leu Met Glu Gln Val Pro
 100 105 110
 His Ile Ala Leu Phe Cys Gln Glu Asn Arg Pro Ser Ile Pro Tyr Ala
 115 120 125
 Phe Ser Lys Phe Leu Leu Pro Ile Val Val Arg Tyr Leu Ala Asp Gln
 130 135 140
 Asn Asn Gln Val Arg Lys Thr Ser Gln Ala Ala Leu Leu Ala Leu Leu
 145 150 155 160
 Glu Gln Glu Leu Ile Glu Arg Phe Asp Val Glu Thr Lys Val Cys Pro
 165 170 175
 Val Leu Ile Glu Leu Thr Ala Pro Asp Ser Asn Asp Asp Val Lys Thr
 180 185 190
 Glu Ala Val Ala Ile Met Cys Lys Met Ala Pro Met Val Gly Lys Asp
 195 200 205
 Ile Thr Glu Arg Leu Ile Leu Pro Arg Phe Cys Glu Met Cys Cys Asp
 210 215 220
 Cys Arg Met Phe His Val Arg Lys Val Cys Ala Ala Asn Phe Gly Asp
 225 230 235 240
 Ile Cys Ser Val Val Gly Gln Gln Ala Thr Glu Glu Met Leu Leu Pro
 245 250 255
 Arg Phe Phe Gln Leu Cys Ser Asp Asn Val Trp Gly Val Arg Lys Ala
 260 265 270
 Cys Ala Glu Cys Phe Met Ala Val Ser Cys Ala Thr Cys Gln Glu Ile
 275 280 285
 Arg Arg Thr Lys Leu Ser Ala Leu Phe Ile Asn Leu Ile Ser Asp Pro
 290 295 300

Ser	Arg	Trp	Val	Arg	Gln	Ala	Ala	Phe	Gln	Ser	Leu	Gly	Pro	Phe	Ile
305					310					315					320
Ser	Thr	Phe	Ala	Asn	Pro	Ser	Ser	Ser	Gly	Gln	Tyr	Phe	Lys	Glu	Glu
				325					330					335	
Ser	Lys	Ser	Ser	Glu	Glu	Met	Ser	Val	Glu	Asn	Lys	Asn	Arg	Thr	Arg
				340				345					350		
Asp	Gln	Glu	Ala	Pro	Glu	Asp	Val	Gln	Val	Arg	Pro	Glu	Asp	Thr	Pro
		355					360					365			
Ser	Asp	Leu	Ser	Val	Ser	Asn	Ser	Ser	Val	Ile	Leu	Glu	Asn	Thr	Met
370						375					380				
Glu	Asp	His	Ala	Ala	Glu	Ala	Ser	Gly	Lys	Pro	Leu	Gly	Glu	Ile	Ser
385					390					395					400
Val	Pro	Leu	Asp	Ser	Ser	Leu	Leu	Cys	Thr	Leu	Ser	Ser	Glu	Ser	His
				405					410					415	
Gln	Glu	Ala	Ala	Ser	Asn	Glu	Asn	Asp	Lys	Lys	Pro	Gly	Asn	Tyr	Lys
			420					425					430		
Ser	Met	Leu	Arg	Pro	Glu	Val	Gly	Thr	Thr	Ser	Gln	Asp	Ser	Ala	Leu
		435					440					445			
Leu	Asp	Gln	Glu	Leu	Tyr	Asn	Ser	Phe	His	Phe	Trp	Arg	Thr	Pro	Leu
450						455					460				
Pro	Glu	Ile	Asp	Leu	Asp	Ile	Glu	Leu	Glu	Gln	Asn	Ser	Gly	Gly	Lys
465					470					475					480
Pro	Ser	Pro	Glu	Gly	Pro	Glu	Glu	Glu	Ser	Glu	Gly	Pro	Val	Pro	Ser
				485					490					495	
Ser	Pro	Asn	Ile	Thr	Met	Ala	Thr	Arg	Lys	Glu	Leu	Glu	Glu	Met	Ile
			500					505					510		
Glu	Asn	Leu	Glu	Pro	His	Ile	Asp	Asp	Pro	Asp	Val	Lys	Ala	Gln	Val
		515					520					525			
Glu	Val	Leu	Ser	Ala	Ala	Leu	Arg	Ala	Ser	Ser	Leu	Asp	Ala	His	Glu
	530					535					540				
Glu	Thr	Ile	Ser	Ile	Glu	Lys	Arg	Ser	Asp	Leu	Gln	Asp	Glu	Leu	Asp
545					550					555					560
Ile	Asn	Glu	Leu	Pro	Asn	Cys	Lys	Ile	Asn	Gln	Glu	Asp	Ser	Val	Pro
			565						570					575	
Leu	Ile	Ser	Asp	Ala	Val	Glu	Asn	Met	Asp	Ser	Thr	Leu	His	Tyr	Ile
			580					585					590		
His	Ser	Asp	Ser	Asp	Leu	Ser	Asn	Asn	Ser	Ser	Phe	Ser	Pro	Asp	Glu
		595					600					605			
Glu	Arg	Arg	Thr	Lys	Val	Gln	Asp	Val	Val	Pro	Gln	Ala	Leu	Leu	Asp
	610					615					620				
Gln	Tyr	Leu	Ser	Met	Thr	Asp	Pro	Ser	Arg	Ala	Gln	Thr	Val	Asp	Thr
625					630					635					640
Glu	Ile	Ala	Lys	His	Cys	Ala	Tyr	Ser	Leu	Pro	Gly	Val	Ala	Leu	Thr
				645					650					655	
Leu	Gly	Arg	Gln	Asn	Trp	His	Cys	Leu	Arg	Glu	Thr	Tyr	Glu	Thr	Leu
			660					665					670		
Ala	Ser	Asp	Met	Gln	Trp	Lys	Val	Arg	Arg	Thr	Leu	Ala	Phe	Ser	Ile
		675					680					685			
His	Glu	Leu	Ala	Val	Ile	Leu	Gly	Asp	Gln	Leu	Thr	Ala	Ala	Asp	Leu
	690					695					700				
Val	Pro	Ile	Phe	Asn	Gly	Phe	Leu	Lys	Asp	Leu	Asp	Glu	Val	Arg	Ile
705					710					715					720
Gly	Val	Leu	Lys	His	Leu	His	Asp	Phe	Leu	Lys	Leu	Leu	His	Ile	Asp
				725					730					735	
Lys	Arg	Arg	Glu	Tyr	Leu	Tyr	Gln	Leu	Gln	Glu	Phe	Leu	Val	Thr	Asp
			740					745					750		
Asn	Ser	Arg	Asn	Trp	Arg	Phe	Arg	Ala	Glu	Leu	Ala	Glu	Gln	Leu	Ile
		755					760					765			
Leu	Leu	Leu	Glu	Leu	Tyr	Ser	Pro	Arg	Asp	Val	Tyr	Asp	Tyr	Leu	Arg
	770					775					780				
Pro	Ile	Ala	Leu	Asn	Leu	Cys	Ala	Asp	Lys	Val	Ser	Ser	Val	Arg	Trp
785					790					795					800
Ile	Ser	Tyr	Lys	Leu	Val	Ser	Glu	Met	Val	Lys	Lys	Leu	His	Ala	Ala
				805					810					815	


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Thr Pro Pro Thr Phe Gly Val Asp Leu Ile Asn Glu Leu Val Glu Asn
      820      825      830
Phe Gly Arg Cys Pro Lys Trp Ser Gly Arg Gln Ala Phe Val Phe Val
      835      840      845
Cys Gln Thr Val Ile Glu Asp Asp Cys Leu Pro Met Asp Gln Phe Ala
      850      855      860
Val His Leu Met Pro His Leu Leu Thr Leu Ala Asn Asp Arg Val Pro
      865      870      875      880
Asn Val Arg Val Leu Leu Ala Lys Thr Leu Arg Gln Thr Leu Leu Glu
      885      890      895
Lys Asp Tyr Phe Leu Ala Ser Ala Ser Cys His Gln Glu Ala Val Glu
      900      905      910
Gln Thr Ile Met Ala Leu Gln Met Asp Arg Asp Ser Asp Val Lys Tyr
      915      920      925
Phe Ala Ser Ile His Pro Ala Ser Thr Lys Ile Ser Glu Asp Ala Met
      930      935      940
Ser Thr Ala Ser Ser Thr Tyr *
945      950 951

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<210> 1924
<211> 636
<212> PRT
<213> Homo sapiens

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<400> 1924
Met Ala Val Pro Pro Gly His Gly Pro Phe Ser Gly Phe Pro Gly Pro
  1      5      10      15
Gln Glu His Thr Gln Val Leu Pro Asp Val Arg Leu Leu Pro Arg Arg
      20      25      30
Leu Pro Leu Ala Phe Arg Asp Ala Thr Ser Ala Pro Leu Arg Lys Leu
      35      40      45
Ser Val Asp Leu Ile Lys Thr Tyr Lys His Ile Asn Glu Val Tyr Tyr
      50      55      60
Ala Lys Lys Lys Arg Arg Ala Gln Gln Ala Pro Pro Gln Asp Ser Ser
      65      70      75      80
Asn Lys Lys Glu Lys Lys Val Leu Asn His Gly Tyr Asp Asp Asp Asn
      85      90      95
His Asp Tyr Ile Val Arg Ser Gly Glu Arg Trp Leu Glu Arg Tyr Glu
      100      105      110
Ile Asp Ser Leu Ile Gly Lys Gly Ser Phe Gly Gln Val Val Lys Ala
      115      120      125
Tyr Asp His Gln Thr Gln Glu Leu Val Ala Ile Lys Ile Ile Lys Asn
      130      135      140
Lys Lys Ala Phe Leu Asn Gln Ala Gln Ile Glu Leu Arg Leu Leu Glu
      145      150      155      160
Leu Met Asn Gln His Asp Thr Glu Met Lys Tyr Tyr Ile Val His Leu
      165      170      175
Lys Arg His Phe Met Phe Arg Asn His Leu Cys Leu Val Phe Glu Leu
      180      185      190
Leu Ser Tyr Asn Leu Tyr Asp Leu Leu Arg Asn Thr His Phe Arg Gly
      195      200      205
Val Ser Leu Asn Leu Thr Arg Lys Leu Ala Gln Gln Leu Cys Thr Ala
      210      215      220
Leu Leu Phe Leu Ala Thr Pro Glu Leu Ser Ile Ile His Cys Asp Leu
      225      230      235      240
Lys Pro Glu Asn Ile Leu Leu Cys Asn Pro Lys Arg Ser Ala Ile Lys
      245      250      255
Ile Val Asp Phe Gly Ser Ser Cys Gln Leu Gly Gln Arg Ile Tyr Gln
      260      265      270
Tyr Ile Gln Ser Arg Phe Tyr Arg Ser Pro Glu Val Leu Leu Gly Thr
      275      280      285

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Pro Tyr Asp Leu Ala Ile Asp Met Trp Ser Leu Gly Cys Ile Leu Val
 290 295 300
 Glu Met His Thr Gly Glu Pro Leu Phe Ser Gly Ser Asn Glu Val Cys
 305 310 315 320
 Pro Gln Glu Gly Val Asp Gln Met Asn Arg Ile Val Glu Val Leu Gly
 325 330 335
 Ile Pro Pro Ala Ala Met Leu Asp Gln Ala Pro Lys Ala Arg Lys Tyr
 340 345 350
 Phe Glu Arg Leu Pro Gly Gly Gly Trp Thr Leu Arg Arg Thr Lys Glu
 355 360 365
 Leu Arg Lys Asp Tyr Gln Gly Pro Gly Thr Arg Arg Leu Gln Glu Val
 370 375 380
 Leu Gly Val Gln Thr Gly Gly Pro Gly Gly Arg Arg Ala Gly Glu Pro
 385 390 395 400
 Gly His Ser Pro Ala Asp Tyr Leu Arg Phe Gln Asp Leu Val Leu Arg
 405 410 415
 Met Leu Glu Tyr Glu Pro Ala Ala Arg Ile Ser Pro Leu Gly Ala Leu
 420 425 430
 Gln His Gly Phe Phe Arg Arg Thr Ala Asp Glu Ala Thr Asn Thr Gly
 435 440 445
 Pro Ala Gly Ser Ser Ala Ser Thr Ser Pro Ala Pro Leu Asp Thr Cys
 450 455 460
 Pro Ser Ser Ser Thr Ala Ser Ser Ile Ser Ser Ser Gly Gly Ser Ser
 465 470 475 480
 Gly Ser Ser Ser Asp Asn Arg Thr Tyr Arg Tyr Ser Asn Arg Tyr Cys
 485 490 495
 Gly Gly Pro Gly Pro Pro Ile Thr Asp Cys Glu Met Asn Ser Pro Gln
 500 505 510
 Val Pro Pro Ser Gln Pro Leu Arg Pro Trp Ala Gly Gly Asp Val Pro
 515 520 525
 His Lys Thr His Gln Ala Pro Ala Ser Ala Ser Ser Leu Pro Gly Thr
 530 535 540
 Gly Ala Gln Leu Pro Pro Gln Pro Arg Tyr Leu Gly Arg Pro Pro Ser
 545 550 555 560
 Pro Thr Ser Pro Pro Pro Pro Glu Leu Met Asp Val Ser Leu Val Gly
 565 570 575
 Gly Pro Ala Asp Cys Ser Pro Pro His Pro Ala Pro Ala Pro Gln His
 580 585 590
 Pro Ala Ala Ser Ala Leu Arg Thr Arg Met Thr Gly Gly Arg Pro Pro
 595 600 605
 Leu Pro Pro Pro Asp Asp Pro Ala Thr Leu Gly Pro His Leu Gly Leu
 610 615 620
 Arg Gly Val Pro Gln Ser Thr Ala Ala Ser Ser *
 625 630 635

<210> 1925

<211> 102

<212> PRT

<213> Homo sapiens

<400> 1925

Met Asp Pro Ser Glu Ala Trp Ala Asn Ala Thr Cys Pro Gly Val Thr
 1 5 10 15
 Tyr Asp Gln Glu Ser His Gln Val Ile Leu Arg Leu Gly Asp His Glu
 20 25 30
 Phe Ile Lys Ser Leu Thr Pro Leu Glu Gly Thr Gln Asp Thr Phe Thr
 35 40 45
 Asn Phe Gln Gln Val Tyr Leu Trp Lys Asp Ser Asp Met Gly Ser Arg
 50 55 60
 Pro Glu Ser Met Gly Cys Arg Lys Asn Thr Val Pro Arg Pro Ala Ser
 65 70 75 80

Pro Thr Glu Ala Gly Thr Asp Pro Gln Thr Phe Leu His Thr Trp Val
 85 90 95
 Ser Glu Cys Arg Asp *
 100 101

<210> 1926
 <211> 1204
 <212> PRT
 <213> Homo sapiens

<400> 1926
 Met Glu Gln Ala Pro Asn Met Ala Glu Pro Arg Gly Pro Val Asp His
 1 5 10 15
 Gly Val Gln Ile Arg Phe Ile Thr Glu Pro Val Ser Gly Ala Glu Met
 20 25 30
 Gly Thr Leu Arg Arg Gly Gly Arg Arg Pro Ala Lys Asp Ala Arg Ala
 35 40 45
 Ser Thr Tyr Gly Val Ala Val Arg Val Gln Gly Ile Ala Gly Gln Pro
 50 55 60
 Phe Val Val Leu Asn Ser Gly Glu Lys Gly Gly Asp Ser Phe Gly Val
 65 70 75 80
 Gln Ile Lys Gly Ala Asn Asp Gln Gly Ala Ser Gly Ala Leu Ser Ser
 85 90 95
 Asp Leu Glu Leu Pro Glu Asn Pro Tyr Ser Gln Val Lys Gly Phe Pro
 100 105 110
 Ala Pro Ser Gln Ser Ser Thr Ser Asp Glu Glu Pro Gly Ala Tyr Trp
 115 120 125
 Asn Gly Lys Leu Leu Arg Ser His Ser Gln Ala Ser Leu Ala Gly Pro
 130 135 140
 Gly Pro Val Asp Pro Ser Asn Arg Ser Asn Ser Met Leu Glu Leu Ala
 145 150 155 160
 Pro Lys Val Ala Ser Pro Gly Ser Thr Ile Asp Thr Ala Pro Leu Ser
 165 170 175
 Ser Val Asp Ser Leu Ile Asn Lys Phe Asp Ser Gln Leu Gly Gly Gln
 180 185 190
 Ala Arg Gly Arg Thr Gly Arg Arg Thr Arg Met Leu Pro Pro Glu Gln
 195 200 205
 Arg Lys Arg Ser Lys Ser Leu Asp Ser Arg Leu Pro Arg Asp Thr Phe
 210 215 220
 Glu Glu Arg Glu Arg Gln Ser Thr Asn His Trp Thr Ser Ser Thr Lys
 225 230 235 240
 Tyr Asp Asn His Val Gly Thr Ser Lys Gln Pro Ala Gln Ser Gln Asn
 245 250 255
 Leu Ser Pro Leu Ser Gly Phe Ser Arg Ser Arg Gln Thr Gln Asp Trp
 260 265 270
 Val Leu Gln Ser Phe Glu Glu Pro Arg Arg Ser Ala Gln Asp Pro Thr
 275 280 285
 Met Leu Gln Phe Lys Ser Thr Pro Asp Leu Leu Arg Asp Gln Gln Glu
 290 295 300
 Ala Ala Pro Pro Gly Ser Val Asp His Met Lys Ala Thr Ile Tyr Gly
 305 310 315 320
 Ile Leu Arg Glu Gly Ser Ser Glu Ser Glu Thr Ser Val Arg Arg Lys
 325 330 335
 Val Ser Leu Val Leu Glu Lys Met Gln Pro Leu Val Met Val Ser Ser
 340 345 350
 Gly Ser Thr Lys Ala Val Ala Gly Gln Gly Glu Leu Thr Arg Lys Val
 355 360 365
 Glu Glu Leu Gln Arg Lys Leu Asp Glu Glu Val Lys Lys Arg Gln Lys
 370 375 380
 Leu Glu Pro Ser Gln Val Gly Leu Glu Arg Gln Leu Glu Glu Lys Thr
 385 390 395 400

Glu	Glu	Cys	Ser	Arg	Leu	Gln	Glu	Leu	Leu	Glu	Arg	Arg	Lys	Gly	Glu	
				405					410					415		
Ala	Gln	Gln	Ser	Asn	Lys	Glu	Leu	Gln	Asn	Met	Lys	Arg	Leu	Leu	Asp	
			420					425					430			
Gln	Gly	Glu	Asp	Leu	Arg	His	Gly	Leu	Glu	Thr	Gln	Val	Met	Glu	Leu	
		435					440					445				
Gln	Asn	Lys	Leu	Lys	His	Val	Gln	Gly	Pro	Glu	Pro	Ala	Lys	Glu	Val	
	450				455					460						
Leu	Leu	Lys	Asp	Leu	Leu	Glu	Thr	Arg	Glu	Leu	Leu	Glu	Glu	Val	Leu	
465				470					475						480	
Glu	Gly	Lys	Gln	Arg	Val	Glu	Glu	Gln	Leu	Arg	Leu	Arg	Glu	Arg	Glu	
				485					490					495		
Leu	Thr	Ala	Leu	Lys	Gly	Ala	Leu	Lys	Glu	Glu	Val	Ala	Ser	Arg	Asp	
		500					505						510			
Gln	Glu	Val	Glu	His	Val	Arg	Gln	Gln	Tyr	Gln	Arg	Asp	Thr	Glu	Gln	
	515						520					525				
Leu	Arg	Arg	Ser	Met	Gln	Asp	Ala	Thr	Gln	Asp	His	Ala	Val	Leu	Glu	
	530					535					540					
Ala	Glu	Arg	Gln	Lys	Met	Ser	Ala	Leu	Val	Arg	Gly	Leu	Gln	Arg	Glu	
545				550					555						560	
Leu	Glu	Glu	Thr	Ser	Glu	Glu	Thr	Gly	Arg	Trp	Gln	Ser	Met	Phe	Gln	
				565					570					575		
Lys	Asn	Lys	Glu	Asp	Leu	Arg	Ala	Thr	Lys	Gln	Glu	Leu	Leu	Gln	Leu	
		580					585						590			
Arg	Met	Glu	Lys	Glu	Glu	Met	Glu	Glu	Glu	Leu	Gly	Glu	Lys	Ile	Glu	
		595					600					605				
Val	Leu	Gln	Arg	Glu	Leu	Glu	Gln	Ala	Arg	Ala	Ser	Ala	Gly	Asp	Thr	
	610					615					620					
Arg	Gln	Val	Glu	Val	Leu	Lys	Lys	Glu	Leu	Leu	Arg	Thr	Gln	Glu	Glu	
625				630					635						640	
Leu	Lys	Glu	Leu	Gln	Ala	Glu	Arg	Gln	Ser	Gln	Glu	Val	Ala	Gly	Arg	
				645					650					655		
His	Arg	Asp	Arg	Glu	Leu	Glu	Lys	Gln	Leu	Ala	Val	Leu	Arg	Val	Glu	
		660					665						670			
Ala	Asp	Arg	Gly	Arg	Glu	Leu	Glu	Gln	Asn	Leu	Gln	Leu	Gln	Lys		
		675					680					685				
Thr	Leu	Gln	Gln	Leu	Arg	Gln	Asp	Cys	Glu	Glu	Ala	Ser	Lys	Ala	Lys	
	690					695					700					
Met	Val	Ala	Glu	Ala	Glu	Ala	Thr	Val	Leu	Gly	Gln	Arg	Arg	Ala	Ala	
705				710					715						720	
Val	Glu	Thr	Thr	Leu	Arg	Glu	Thr	Gln	Glu	Glu	Asn	Asp	Glu	Phe	Arg	
				725					730					735		
Arg	Arg	Ile	Leu	Gly	Leu	Glu	Gln	Gln	Leu	Lys	Glu	Thr	Arg	Gly	Leu	
		740					745						750			
Val	Asp	Gly	Gly	Glu	Ala	Val	Glu	Ala	Arg	Leu	Arg	Asp	Lys	Leu	Gln	
	755						760					765				
Arg	Leu	Glu	Ala	Glu	Lys	Gln	Leu	Glu	Glu	Ala	Leu	Asn	Ala	Ser		
	770					775				780						
Gln	Glu	Glu	Glu	Gly	Ser	Leu	Ala	Ala	Ala	Lys	Arg	Ala	Leu	Glu	Ala	
785				790						795					800	
Arg	Leu	Glu	Glu	Ala	Gln	Arg	Gly	Leu	Ala	Arg	Leu	Gly	Gln	Glu	Gln	
				805					810					815		
Gln	Thr	Leu	Asn	Arg	Ala	Leu	Glu	Glu	Glu	Gly	Lys	Gln	Arg	Glu	Val	
		820					825						830			
Leu	Arg	Arg	Gly	Lys	Ala	Glu	Leu	Glu	Glu	Gln	Lys	Arg	Leu	Leu	Asp	
		835					840					845				
Arg	Thr	Val	Asp	Arg	Leu	Asn	Lys	Glu	Leu	Glu	Lys	Ile	Gly	Glu	Asp	
	850					855						860				
Ser	Lys	Gln	Ala	Leu	Gln	Gln	Leu	Gln	Ala	Gln	Leu	Glu	Asp	Tyr	Lys	
865				870						875					880	
Glu	Lys	Ala	Arg	Arg	Glu	Val	Ala	Asp	Ala	Gln	Arg	Gln	Ala	Lys	Asp	
				885					890					895		
Trp	Ala	Ser	Glu	Ala	Glu	Lys	Thr	Ser	Gly	Gly	Leu	Ser	Arg	Leu	Gln	
			900					905						910		

Asp Glu Ile Gln Arg Leu Arg Gln Ala Leu Gln Ala Ser Gln Ala Glu
 915 920 925
 Arg Asp Thr Ala Arg Leu Asp Lys Glu Leu Leu Ala Gln Arg Leu Gln
 930 935 940
 Gly Leu Glu Gln Glu Ala Glu Asn Lys Lys Arg Ser Gln Asp Asp Arg
 945 950 955 960
 Ala Arg Gln Leu Lys Gly Leu Glu Glu Lys Val Ser Arg Leu Glu Thr
 965 970 975
 Glu Leu Asp Glu Glu Lys Asn Thr Val Glu Leu Leu Thr Asp Arg Val
 980 985 990
 Asn Arg Gly Arg Asp Gln Val Asp Gln Leu Arg Thr Glu Leu Met Gln
 995 1000 1005
 Glu Arg Ser Ala Arg Gln Asp Leu Glu Cys Asp Lys Ile Ser Leu Glu
 1010 1015 1020
 Arg Gln Asn Lys Asp Leu Lys Thr Arg Leu Ala Ser Ser Glu Gly Phe
 1025 1030 1035 1040
 Gln Lys Pro Ser Ala Ser Leu Ser Gln Leu Glu Ser Gln Asn Gln Leu
 1045 1050 1055
 Leu Gln Glu Arg Leu Gln Ala Glu Glu Arg Glu Lys Thr Val Leu Gln
 1060 1065 1070
 Ser Thr Asn Arg Lys Leu Glu Arg Lys Val Lys Glu Leu Ser Ile Gln
 1075 1080 1085
 Ile Glu Asp Glu Arg Gln His Val Asn Asp Gln Lys Asp Gln Leu Ser
 1090 1095 1100
 Leu Arg Val Lys Ala Leu Lys Arg Gln Val Asp Glu Ala Glu Glu Glu
 1105 1110 1115 1120
 Ile Glu Arg Leu Asp Gly Leu Arg Lys Lys Ala Gln Arg Glu Val Glu
 1125 1130 1135
 Glu Gln His Glu Val Asn Glu Gln Leu Gln Ala Arg Ile Lys Ser Leu
 1140 1145 1150
 Glu Lys Asp Ser Trp Arg Lys Ala Ser Arg Ser Ala Ala Glu Ser Ala
 1155 1160 1165
 Leu Lys Asn Glu Gly Leu Ser Ser Asp Glu Glu Phe Asp Ser Val Tyr
 1170 1175 1180
 Asp Pro Ser Ser Ile Ala Ser Leu Leu Thr Glu Ser Asn Leu Gln Thr
 1185 1190 1195 1200
 Ser Ser Cys *
 1203

<210> 1927

<211> 555

<212> PRT

<213> Homo sapiens

<400> 1927

Met Ala Phe Thr Gln Leu Thr Phe Arg Asp Val Ala Ile Glu Phe Ser
 1 5 10 15
 Gln Asp Glu Trp Lys Cys Leu Asn Ser Thr Gln Arg Thr Leu Tyr Arg
 20 25 30
 Asp Val Met Leu Glu Asn Tyr Arg Asn Leu Val Ser Leu Asp Leu Ser
 35 40 45
 Arg Asn Cys Val Ile Lys Glu Leu Ala Pro Gln Gln Glu Gly Asn Pro
 50 55 60
 Gly Glu Val Phe His Thr Val Thr Leu Glu Gln His Glu Lys His Asp
 65 70 75 80
 Ile Glu Glu Phe Cys Phe Arg Glu Ile Lys Lys Lys Ile His Asp Phe
 85 90 95
 Asp Cys Gln Trp Arg Asp Asp Glu Arg Asn Cys Asn Lys Val Thr Thr
 100 105 110
 Ala Pro Lys Glu Asn Leu Thr Cys Arg Arg Asp Gln Arg Asp Arg Arg
 115 120 125

Gly	Ile	Gly	Asn	Lys	Ser	Ile	Lys	His	Gln	Leu	Gly	Leu	Ser	Phe	Leu
130						135					140				
Pro	His	Pro	His	Glu	Leu	Gln	Gln	Phe	Gln	Ala	Glu	Gly	Lys	Ile	Tyr
145				150						155					160
Glu	Cys	Asn	His	Val	Glu	Lys	Ser	Val	Asn	His	Gly	Ser	Ser	Val	Ser
			165						170						175
Pro	Pro	Gln	Ile	Leu	Ser	Ser	Thr	Val	Lys	Thr	His	Val	Ser	Asn	Lys
			180					185						190	
Tyr	Gly	Thr	Asp	Phe	Ile	Cys	Ser	Ser	Leu	Leu	Thr	Gln	Glu	Gln	Lys
		195					200					205			
Ser	Cys	Ile	Arg	Glu	Lys	Pro	Tyr	Arg	Tyr	Ile	Glu	Cys	Asp	Lys	Ala
	210					215					220				
Leu	Asn	His	Gly	Ser	His	Met	Thr	Val	Arg	Gln	Val	Ser	His	Ser	Gly
225					230					235					240
Glu	Lys	Gly	Tyr	Lys	Cys	Asp	Leu	Cys	Gly	Lys	Val	Phe	Ser	Gln	Lys
				245					250						255
Ser	Asn	Leu	Ala	Arg	His	Trp	Arg	Val	His	Thr	Gly	Glu	Lys	Pro	Tyr
			260					265						270	
Lys	Cys	Asn	Glu	Cys	Asp	Arg	Ser	Phe	Ser	Arg	Asn	Ser	Cys	Leu	Ala
	275					280					285				
Leu	His	Arg	Arg	Val	His	Thr	Gly	Glu	Lys	Pro	Tyr	Lys	Cys	Tyr	Glu
	290					295					300				
Cys	Asp	Lys	Val	Phe	Ser	Arg	Asn	Ser	Cys	Leu	Ala	Leu	His	Gln	Lys
305					310					315					320
Thr	His	Ile	Gly	Glu	Lys	Pro	Tyr	Thr	Cys	Lys	Glu	Cys	Gly	Lys	Ala
			325						330						335
Phe	Ser	Val	Arg	Ser	Thr	Leu	Thr	Asn	His	Gln	Val	Ile	His	Ser	Gly
			340					345						350	
Lys	Lys	Pro	Tyr	Lys	Cys	Asn	Glu	Cys	Gly	Lys	Val	Phe	Ser	Gln	Thr
		355					360					365			
Ser	Ser	Leu	Ala	Thr	His	Gln	Arg	Ile	His	Thr	Gly	Glu	Lys	Pro	Tyr
	370					375					380				
Lys	Cys	Asn	Glu	Cys	Gly	Lys	Val	Phe	Ser	Gln	Thr	Ser	Ser	Leu	Ala
385					390					395					400
Arg	His	Trp	Arg	Ile	His	Thr	Gly	Glu	Lys	Pro	Tyr	Lys	Cys	Asn	Glu
			405					410						415	
Cys	Gly	Lys	Val	Phe	Ser	Tyr	Asn	Ser	His	Leu	Ala	Ser	His	Arg	Arg
			420					425						430	
Val	His	Thr	Gly	Glu	Lys	Pro	Tyr	Lys	Cys	Asn	Glu	Cys	Gly	Lys	Ala
		435					440				445				
Phe	Ser	Val	His	Ser	Asn	Leu	Thr	Thr	His	Gln	Val	Ile	His	Thr	Gly
	450					455					460				
Glu	Lys	Pro	Tyr	Lys	Cys	Asn	Gln	Cys	Gly	Lys	Gly	Phe	Ser	Val	His
465					470					475					480
Ser	Ser	Leu	Thr	Thr	His	Gln	Val	Ile	His	Thr	Gly	Glu	Lys	Pro	Tyr
			485					490						495	
Lys	Cys	Asn	Glu	Cys	Gly	Lys	Ser	Phe	Ser	Val	Arg	Pro	Asn	Leu	Thr
		500						505						510	
Arg	His	Gln	Ile	Ile	His	Thr	Gly	Lys	Lys	Pro	Tyr	Lys	Cys	Ser	Asp
		515					520					525			
Cys	Gly	Lys	Ser	Phe	Ser	Val	Arg	Pro	Asn	Leu	Phe	Arg	His	Gln	Ile
	530					535					540				
Ile	His	Thr	Lys	Glu	Lys	Pro	Tyr	Lys	Arg	Asn					
545					550					555					

<210> 1928

<211> 214

<212> PRT

<213> Homo sapiens

<400> 1928


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Met Val Gln Ser Cys Ser Ala Tyr Gly Cys Lys Asn Arg Tyr Asp Lys
 1          5          10          15
Asp Lys Pro Val Ser Phe His Lys Phe Pro Leu Thr Arg Pro Ser Leu
          20          25          30
Cys Lys Glu Trp Glu Ala Ala Val Arg Arg Lys Asn Phe Lys Pro Thr
          35          40          45
Lys Tyr Ser Ser Ile Cys Ser Glu His Phe Thr Pro Asp Cys Phe Lys
          50          55          60
Arg Glu Cys Asn Asn Lys Leu Leu Lys Glu Asn Ala Val Pro Thr Ile
          65          70          75          80
Phe Leu Cys Thr Glu Pro His Asp Lys Lys Glu Asp Leu Leu Glu Pro
          85          90          95
Gln Glu Gln Leu Pro Pro Pro Pro Leu Pro Pro Pro Val Ser Gln Val
          100          105          110
Asp Ala Ala Ile Gly Leu Leu Met Pro Pro Leu Gln Thr Pro Val Asn
          115          120          125
Leu Ser Val Phe Cys Asp His Asn Tyr Thr Val Glu Asp Thr Met His
          130          135          140
Gln Arg Lys Arg Ile His Gln Leu Glu Gln Gln Val Glu Lys Leu Arg
          145          150          155          160
Lys Lys Leu Lys Thr Ala Gln Gln Arg Cys Arg Arg Gln Glu Arg Gln
          165          170          175
Leu Glu Lys Leu Lys Glu Val Val His Phe Gln Lys Glu Lys Asp Asp
          180          185          190
Val Ser Glu Arg Gly Tyr Val Ile Leu Pro Asn Asp Tyr Phe Glu Ile
          195          200          205
Val Glu Val Pro Ala *
          210          213

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<210> 1929
<211> 155
<212> PRT
<213> Homo sapiens

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<400> 1929
Met Ile His Phe Ile Leu Leu Phe Ser Arg Gln Gly Lys Leu Arg Leu
 1          5          10          15
Gln Lys Trp Tyr Ile Thr Leu Pro Asp Lys Glu Arg Lys Lys Ile Thr
          20          25          30
Arg Glu Ile Val Gln Ile Ile Leu Ser Arg Gly His Arg Thr Ser Ser
          35          40          45
Phe Val Asp Trp Lys Glu Leu Lys Leu Val Tyr Lys Arg Tyr Ala Ser
          50          55          60
Leu Tyr Phe Cys Cys Ala Ile Glu Asn Gln Asp Asn Glu Leu Leu Thr
          65          70          75          80
Leu Glu Ile Val His Arg Tyr Val Glu Leu Leu Asp Lys Tyr Phe Gly
          85          90          95
Asn Val Cys Glu Leu Asp Ile Ile Phe Asn Phe Glu Lys Ala Tyr Phe
          100          105          110
Ile Leu Asp Glu Phe Ile Ile Gly Gly Glu Ile Gln Glu Thr Ser Lys
          115          120          125
Lys Ile Ala Val Lys Ala Ile Glu Asp Ser Asp Met Leu Gln Glu Val
          130          135          140
Ser Thr Val Ser Gln Thr Met Gly Glu Arg *
          145          150          154

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<210> 1930
<211> 481
<212> PRT

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<213> Homo sapiens

<400> 1930

Met	Ala	Gly	Leu	Arg	Asn	Glu	Ser	Glu	Gln	Glu	Pro	Leu	Leu	Gly	Asp	1	5	10	15
Thr	Pro	Gly	Ser	Arg	Glu	Trp	Asp	Ile	Leu	Glu	Thr	Glu	Glu	His	Tyr	20	25	30	
Lys	Ser	Arg	Trp	Arg	Ser	Ile	Arg	Ile	Leu	Tyr	Leu	Thr	Met	Phe	Leu	35	40	45	
Ser	Ser	Val	Gly	Phe	Ser	Val	Val	Met	Met	Ser	Ile	Trp	Pro	Tyr	Leu	50	55	60	
Gln	Lys	Ile	Asp	Pro	Thr	Ala	Asp	Thr	Ser	Phe	Leu	Gly	Trp	Val	Ile	65	70	75	80
Ala	Ser	Tyr	Ser	Leu	Gly	Gln	Met	Val	Ala	Ser	Pro	Ile	Phe	Gly	Leu	85	90	95	
Trp	Ser	Asn	Tyr	Arg	Pro	Arg	Lys	Glu	Pro	Leu	Ile	Val	Ser	Ile	Leu	100	105	110	
Ile	Ser	Val	Ala	Ala	Asn	Cys	Leu	Tyr	Ala	Tyr	Leu	His	Ile	Pro	Ala	115	120	125	
Ser	His	Asn	Lys	Tyr	Tyr	Met	Leu	Val	Ala	Arg	Gly	Leu	Leu	Gly	Ile	130	135	140	
Gly	Ala	Val	Phe	Gln	Thr	Cys	Phe	Thr	Phe	Leu	Gly	Glu	Lys	Gly	Val	145	150	155	160
Thr	Trp	Asp	Val	Ile	Lys	Leu	Gln	Ile	Asn	Met	Tyr	Thr	Thr	Pro	Val	165	170	175	
Leu	Leu	Ser	Ala	Phe	Leu	Gly	Ile	Leu	Asn	Ile	Ile	Leu	Ile	Leu	Ala	180	185	190	
Ile	Leu	Arg	Glu	His	Arg	Val	Asp	Asp	Ser	Gly	Arg	Gln	Cys	Lys	Ser	195	200	205	
Ile	Asn	Phe	Glu	Glu	Ala	Ser	Thr	Asp	Glu	Ala	Gln	Val	Pro	Gln	Gly	210	215	220	
Asn	Ile	Asp	Gln	Val	Ala	Val	Val	Ala	Ile	Asn	Val	Leu	Phe	Phe	Val	225	230	235	240
Thr	Leu	Phe	Ile	Phe	Ala	Leu	Phe	Glu	Thr	Ile	Ile	Thr	Pro	Leu	Thr	245	250	255	
Met	Asp	Met	Tyr	Ala	Trp	Thr	Gln	Glu	Gln	Ala	Val	Leu	Tyr	Asn	Gly	260	265	270	
Ile	Ile	Leu	Ala	Ala	Leu	Gly	Val	Glu	Ala	Val	Val	Ile	Phe	Leu	Gly	275	280	285	
Val	Lys	Leu	Leu	Ser	Lys	Lys	Ile	Gly	Glu	Arg	Ala	Ile	Leu	Leu	Gly	290	295	300	
Gly	Leu	Ile	Val	Val	Trp	Val	Gly	Phe	Phe	Ile	Leu	Leu	Pro	Trp	Gly	305	310	315	320
Asn	Gln	Phe	Pro	Lys	Ile	Gln	Trp	Glu	Asp	Leu	His	Asn	Asn	Ser	Ile	325	330	335	
Pro	Asn	Thr	Thr	Phe	Gly	Glu	Ile	Ile	Ile	Gly	Leu	Trp	Lys	Ser	Pro	340	345	350	
Met	Glu	Asp	Asp	Asn	Glu	Arg	Pro	Thr	Gly	Cys	Ser	Ile	Glu	Gln	Ala	355	360	365	
Trp	Cys	Leu	Tyr	Thr	Pro	Val	Ile	His	Leu	Ala	Gln	Phe	Leu	Thr	Ser	370	375	380	
Ala	Val	Leu	Ile	Gly	Leu	Gly	Tyr	Pro	Val	Cys	Asn	Leu	Met	Ser	Tyr	385	390	395	400
Thr	Leu	Tyr	Ser	Lys	Ile	Leu	Gly	Pro	Lys	Pro	Gln	Gly	Val	Tyr	Met	405	410	415	
Gly	Trp	Leu	Thr	Ala	Ser	Gly	Ser	Gly	Ala	Arg	Ile	Leu	Gly	Pro	Met	420	425	430	
Phe	Ile	Ser	Gln	Val	Tyr	Ala	His	Trp	Gly	Pro	Arg	Trp	Ala	Phe	Ser	435	440	445	
Leu	Val	Cys	Gly	Ile	Ile	Val	Leu	Thr	Ile	Thr	Leu	Leu	Gly	Val	Val	450	455	460	
Tyr	Lys	Arg	Leu	Ile	Ala	Leu	Ser	Val	Arg	Tyr	Gly	Arg	Ile	Gln	Glu	465	470	475	480

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<210> 1931
 <211> 1177
 <212> PRT
 <213> Homo sapiens

<400> 1931
 Met Ala Glu Arg Lys Gly Thr Ala Lys Val Asp Phe Leu Lys Lys Ile
 1 5 10 15
 Glu Lys Glu Ile Gln Gln Lys Trp Asp Thr Glu Arg Val Phe Glu Val
 20 25 30
 Asn Ala Ser Asn Leu Glu Lys Gln Thr Ser Lys Gly Lys Tyr Phe Val
 35 40 45
 Thr Phe Pro Tyr Pro Tyr Met Asn Gly Arg Leu His Leu Gly His Thr
 50 55 60
 Phe Ser Leu Ser Lys Cys Glu Phe Ala Val Gly Tyr Gln Arg Leu Lys
 65 70 75 80
 Gly Lys Cys Cys Leu Phe Pro Phe Gly Leu His Cys Thr Gly Met Pro
 85 90 95
 Ile Lys Ala Cys Ala Asp Lys Leu Lys Arg Glu Ile Glu Leu Tyr Gly
 100 105 110
 Cys Pro Pro Asp Phe Pro Asp Glu Glu Glu Glu Glu Glu Thr Ser
 115 120 125
 Val Lys Thr Glu Asp Ile Ile Ile Lys Asp Lys Ala Lys Gly Lys Lys
 130 135 140
 Ser Lys Ala Ala Ala Lys Ala Gly Ser Ser Lys Tyr Gln Trp Gly Ile
 145 150 155 160
 Met Lys Ser Leu Gly Leu Ser Asp Glu Glu Ile Val Lys Phe Ser Glu
 165 170 175
 Ala Glu His Trp Leu Asp Tyr Phe Thr Pro Leu Ala Ile Gln Asp Leu
 180 185 190
 Lys Arg Met Gly Leu Lys Val Asp Trp Arg Arg Ser Phe Ile Thr Thr
 195 200 205
 Asp Val Asn Pro Tyr Tyr Asp Ser Phe Val Arg Trp Gln Phe Leu Thr
 210 215 220
 Leu Arg Glu Arg Asn Lys Ile Lys Phe Gly Lys Arg Tyr Thr Ile Tyr
 225 230 235 240
 Ser Pro Lys Asp Gly Gln Pro Cys Met Asp His Asp Arg Gln Thr Gly
 245 250 255
 Glu Gly Val Gly Pro Gln Glu Tyr Thr Leu Leu Lys Leu Lys Val Leu
 260 265 270
 Glu Pro Tyr Pro Ser Lys Leu Ser Gly Leu Lys Gly Lys Asn Ile Phe
 275 280 285
 Leu Val Ala Ala Thr Leu Arg Pro Glu Thr Met Phe Gly Gln Thr Asn
 290 295 300
 Cys Trp Val Arg Pro Asp Met Lys Tyr Ile Gly Phe Glu Thr Val Asn
 305 310 315 320
 Gly Asp Ile Phe Ile Cys Thr Gln Lys Ala Ala Arg Asn Met Ser Tyr
 325 330 335
 Gln Gly Phe Thr Lys Asp Asn Gly Val Val Pro Val Val Lys Glu Leu
 340 345 350
 Met Gly Glu Glu Ile Leu Gly Ala Ser Leu Ser Ala Pro Leu Thr Ser
 355 360 365
 Tyr Lys Val Ile Tyr Val Leu Pro Met Leu Thr Ile Lys Glu Asp Lys
 370 375 380
 Gly Thr Gly Val Val Thr Ser Val Pro Ser Asp Ser Pro Asp Asp Ile
 385 390 395 400
 Ala Ala Leu Arg Asp Leu Lys Lys Lys Gln Ala Leu Arg Ala Lys Tyr
 405 410 415

Gly Ile Arg Asp Asp Met Val Leu Pro Phe Glu Pro Val Pro Val Ile
420 425 430
Glu Ile Pro Gly Phe Gly Asn Leu Ser Ala Val Thr Ile Cys Asp Glu
435 440 445
Leu Lys Ile Gln Ser Gln Asn Asp Arg Glu Lys Leu Ala Glu Ala Lys
450 455 460
Glu Lys Ile Tyr Leu Lys Gly Phe Tyr Glu Gly Ile Met Leu Val Asp
465 470 475 480
Gly Phe Lys Gly Gln Lys Val Gln Asp Val Lys Lys Thr Ile Gln Lys
485 490 495
Lys Met Ile Asp Ala Gly Asp Ala Leu Ile Tyr Met Glu Pro Glu Lys
500 505 510
Gln Val Met Ser Arg Ser Ser Asp Glu Cys Val Val Ala Leu Cys Asp
515 520 525
Gln Trp Tyr Leu Asp Tyr Gly Glu Glu Asn Trp Lys Lys Gln Thr Ser
530 535 540
Gln Cys Leu Lys Asn Leu Glu Thr Phe Cys Glu Glu Thr Arg Arg Asn
545 550 555 560
Phe Glu Ala Thr Leu Gly Trp Leu Gln Glu His Ala Cys Ser Arg Thr
565 570 575
Tyr Gly Leu Gly Thr His Leu Pro Trp Asp Glu Gln Trp Leu Ile Glu
580 585 590
Ser Leu Ser Asp Ser Thr Ile Tyr Met Ala Phe Tyr Thr Val Ala His
595 600 605
Leu Leu Gln Gly Gly Asn Leu His Gly Gln Ala Glu Ser Pro Leu Gly
610 615 620
Ile Arg Pro Gln Gln Met Thr Lys Glu Val Trp Asp Tyr Val Phe Phe
625 630 635 640
Lys Glu Ala Pro Phe Pro Lys Thr Gln Ile Ala Lys Glu Lys Leu Asp
645 650 655
Gln Leu Lys Gln Glu Phe Glu Phe Trp Tyr Pro Val Asp Leu Arg Val
660 665 670
Ser Gly Lys Asp Leu Val Pro Asn His Leu Ser Tyr Tyr Leu Tyr Asn
675 680 685
His Val Ala Met Trp Pro Glu Gln Ser Asp Lys Trp Pro Thr Ala Val
690 695 700
Arg Ala Asn Gly His Leu Leu Leu Asn Ser Glu Lys Met Ser Lys Ser
705 710 715 720
Thr Gly Asn Phe Leu Thr Leu Thr Gln Ala Ile Asp Lys Phe Ser Ala
725 730 735
Asp Gly Met Arg Leu Ala Leu Ala Asp Ala Gly Asp Thr Val Glu Asp
740 745 750
Ala Asn Phe Val Glu Ala Met Ala Asp Ala Gly Ile Leu Arg Leu Tyr
755 760 765
Thr Trp Val Glu Trp Val Lys Glu Met Val Ala Asn Trp Asp Ser Leu
770 775 780
Arg Ser Gly Pro Ala Ser Thr Phe Asn Asp Arg Val Phe Ala Ser Glu
785 790 795 800
Leu Asn Ala Gly Ile Ile Lys Thr Asp Gln Asn Tyr Glu Lys Met Met
805 810 815
Phe Lys Glu Ala Leu Lys Thr Gly Phe Phe Glu Phe Gln Ala Ala Lys
820 825 830
Asp Lys Tyr Arg Glu Leu Ala Val Glu Gly Met His Arg Glu Leu Val
835 840 845
Phe Arg Phe Ile Glu Val Gln Thr Leu Leu Leu Ala Pro Phe Cys Pro
850 855 860
His Leu Cys Glu His Ile Trp Thr Leu Leu Gly Lys Pro Asp Ser Ile
865 870 875 880
Met Asn Ala Ser Trp Pro Val Ala Gly Pro Val Asn Glu Val Leu Ile
885 890 895
His Ser Ser Gln Tyr Leu Met Glu Val Thr His Asp Leu Arg Leu Arg
900 905 910
Leu Lys Asn Tyr Met Met Pro Ala Lys Gly Lys Lys Thr Asp Lys Gln
915 920 925


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Pro Leu Gln Lys Pro Ser His Cys Thr Ile Tyr Val Ala Lys Asn Tyr
 930          935          940
Pro Pro Trp Gln His Thr Thr Leu Ser Val Leu Arg Lys His Phe Glu
945          950          955          960
Ala Asn Asn Gly Lys Leu Pro Asp Asn Lys Val Ile Ala Ser Glu Leu
          965          970          975
Gly Ser Met Pro Glu Leu Lys Lys Tyr Met Lys Lys Val Met Pro Phe
          980          985          990
Val Ala Met Ile Lys Glu Asn Leu Glu Lys Met Gly Pro Arg Ile Leu
          995          1000          1005
Asp Leu Gln Leu Glu Phe Asp Glu Lys Ala Val Leu Met Glu Asn Ile
 1010          1015          1020
Val Tyr Leu Thr Asn Ser Leu Glu Leu Glu His Ile Glu Val Lys Phe
1025          1030          1035          1040
Ala Ser Glu Ala Glu Asp Lys Ile Arg Glu Asp Cys Cys Pro Gly Lys
          1045          1050          1055
Pro Leu Asn Val Phe Arg Ile Glu Pro Gly Val Ser Val Ser Leu Val
          1060          1065          1070
Asn Pro Gln Pro Ser Asn Gly His Phe Ser Thr Lys Ile Glu Ile Lys
          1075          1080          1085
Gln Gly Asp Asn Cys Asp Ser Ile Ile Arg Arg Leu Met Lys Met Asn
 1090          1095          1100
Arg Gly Ile Lys Asp Leu Ser Lys Val Lys Leu Met Arg Phe Asp Asp
1105          1110          1115          1120
Pro Leu Leu Gly Pro Arg Arg Val Pro Val Leu Gly Lys Glu Tyr Thr
          1125          1130          1135
Glu Lys Thr Pro Ile Ser Glu His Ala Val Phe Asn Val Asp Leu Met
          1140          1145          1150
Ser Lys Lys Ile His Leu Thr Glu Asn Gly Ile Arg Val Asp Ile Gly
          1155          1160          1165
Asp Thr Ile Ile Tyr Leu Val His *
 1170          1175 1176

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<210> 1932
<211> 1707
<212> PRT
<213> Homo sapiens

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<400> 1932
Met Asp Asp Asp Ser Leu Asp Glu Leu Val Ala Arg Ser Pro Gly Pro
 1          5          10          15
Asp Gly His Pro Gln Val Gly Pro Ala Asp Pro Ala Gly Asp Phe Glu
          20          25          30
Glu Ser Ser Val Gly Ser Ser Gly Asp Ser Gly Asp Asp Ser Asp Ser
          35          40          45
Glu His Gly Asp Gly Thr Asp Gly Glu Asp Glu Gly Ala Ser Glu Glu
          50          55          60
Glu Asp Leu Glu Asp Arg Ser Gly Ser Glu Asp Ser Glu Asp Asp Gly
          65          70          75          80
Glu Thr Leu Leu Glu Val Ala Gly Thr Gln Gly Lys Leu Glu Ala Ala
          85          90          95
Gly Ser Phe Asn Ser Asp Asp Asp Ala Glu Ser Cys Pro Ile Cys Leu
          100          105          110
Asn Ala Phe Arg Asp Gln Ala Val Gly Thr Pro Glu Asn Cys Ala His
          115          120          125
Tyr Phe Cys Leu Asp Cys Ile Val Glu Trp Ser Lys Asn Ala Asn Ser
          130          135          140
Cys Pro Val Asp Arg Thr Leu Phe Lys Cys Ile Cys Ile Arg Ala Gln
          145          150          155          160
Phe Gly Gly Lys Ile Leu Lys Lys Ile Pro Val Glu Asn Thr Lys Ala
          165          170          175

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Ser	Glu	Glu	Glu	Glu	Asp	Pro	Thr	Phe	Cys	Glu	Val	Cys	Gly	Arg	Ser	180	185	190
Asp	Arg	Glu	Asp	Arg	Leu	Leu	Leu	Cys	Asp	Gly	Cys	Asp	Ala	Gly	Tyr	195	200	205
His	Met	Glu	Cys	Leu	Asp	Pro	Pro	Leu	Gln	Glu	Val	Pro	Val	Asp	Glu	210	215	220
Trp	Phe	Cys	Pro	Glu	Cys	Ala	Ala	Pro	Gly	Val	Val	Leu	Ala	Ala	Asp	225	230	240
Ala	Gly	Pro	Val	Ser	Glu	Glu	Glu	Val	Ser	Leu	Leu	Leu	Ala	Asp	Val	245	250	255
Val	Pro	Thr	Thr	Ser	Arg	Leu	Arg	Pro	Arg	Ala	Gly	Arg	Thr	Arg	Ala	260	265	270
Ile	Ala	Arg	Thr	Arg	Gln	Ser	Glu	Arg	Val	Arg	Ala	Thr	Val	Asn	Arg	275	280	285
Asn	Arg	Ile	Ser	Thr	Ala	Arg	Arg	Val	Gln	His	Thr	Pro	Gly	Arg	Leu	290	295	300
Gly	Ser	Ser	Leu	Leu	Asp	Glu	Ala	Ile	Glu	Ala	Val	Ala	Thr	Gly	Leu	305	310	320
Ser	Thr	Ala	Val	Tyr	Gln	Arg	Pro	Leu	Thr	Pro	Arg	Thr	Pro	Ala	Arg	325	330	335
Arg	Lys	Arg	Lys	Thr	Arg	Arg	Arg	Lys	Lys	Val	Pro	Gly	Arg	Lys	Lys	340	345	350
Thr	Pro	Ser	Gly	Pro	Ser	Ala	Lys	Ser	Lys	Ser	Ser	Ala	Thr	Arg	Ser	355	360	365
Lys	Lys	Arg	Gln	His	Arg	Val	Lys	Lys	Arg	Arg	Gly	Lys	Lys	Val	Lys	370	375	380
Ser	Glu	Ala	Thr	Thr	Arg	Ser	Arg	Ile	Ala	Arg	Thr	Leu	Gly	Leu	Arg	385	390	400
Arg	Pro	Val	His	Ser	Ser	Cys	Ile	Pro	Ser	Val	Leu	Lys	Pro	Val	Glu	405	410	415
Pro	Ser	Leu	Gly	Leu	Leu	Arg	Ala	Asp	Ile	Gly	Ala	Ala	Ser	Leu	Ser	420	425	430
Leu	Phe	Gly	Asp	Pro	Tyr	Glu	Leu	Asp	Pro	Phe	Asp	Ser	Ser	Glu	Glu	435	440	445
Leu	Ser	Ala	Asn	Pro	Leu	Ser	Pro	Leu	Ser	Ala	Lys	Arg	Arg	Ala	Leu	450	455	460
Ser	Arg	Ser	Ala	Leu	Gln	Ser	His	Gln	Pro	Val	Ala	Arg	Pro	Val	Ser	465	470	480
Val	Gly	Leu	Ser	Arg	Arg	Arg	Leu	Pro	Ala	Ala	Val	Pro	Glu	Pro	Asp	485	490	495
Leu	Glu	Glu	Glu	Pro	Val	Pro	Asp	Leu	Leu	Gly	Ser	Ile	Leu	Ser	Gly	500	505	510
Gln	Ser	Leu	Leu	Met	Leu	Gly	Ser	Ser	Asp	Val	Ile	Ile	His	Arg	Asp	515	520	525
Gly	Ser	Leu	Ser	Ala	Lys	Arg	Ala	Ala	Pro	Val	Ser	Phe	Gln	Arg	Asn	530	535	540
Ser	Gly	Ser	Leu	Ser	Arg	Gly	Glu	Glu	Gly	Phe	Lys	Gly	Cys	Leu	Gln	545	550	560
Pro	Arg	Ala	Leu	Pro	Ser	Gly	Ser	Pro	Ala	Gln	Gly	Pro	Ser	Gly	Asn	565	570	575
Arg	Pro	Gln	Ser	Thr	Gly	Leu	Ser	Cys	Gln	Gly	Arg	Ser	Arg	Thr	Pro	580	585	590
Ala	Arg	Thr	Ala	Gly	Ala	Pro	Val	Arg	Leu	Asp	Leu	Pro	Ala	Ala	Pro	595	600	605
Gly	Ala	Val	Gln	Ala	Arg	Asn	Leu	Ser	Asn	Gly	Ser	Val	Pro	Gly	Phe	610	615	620
Arg	Gln	Ser	His	Ser	Pro	Trp	Phe	Asn	Gly	Thr	Asn	Lys	His	Thr	Leu	625	630	640
Pro	Leu	Ala	Ser	Ala	Ala	Ser	Lys	Ile	Ser	Ser	Arg	Asp	Ser	Lys	Pro	645	650	655
Pro	Cys	Arg	Ser	Val	Val	Pro	Gly	Pro	Pro	Leu	Lys	Pro	Ala	Pro	Arg	660	665	670
Arg	Thr	Asp	Ile	Ser	Glu	Leu	Pro	Arg	Ile	Pro	Lys	Ile	Arg	Arg	Asp	675	680	685

Asp	Gly	Gly	Gly	Arg	Arg	Asp	Ala	Ala	Pro	Ala	His	Gly	Gln	Ser	Ile	690	695	700
Glu	Ile	Pro	Ser	Ala	Cys	Ile	Ser	Arg	Leu	Thr	Gly	Arg	Glu	Gly	Thr	705	710	715
Gly	Gln	Pro	Gly	Arg	Gly	Thr	Arg	Ala	Glu	Ser	Glu	Ala	Ser	Ser	Arg	725	730	735
Val	Pro	Arg	Glu	Pro	Gly	Val	His	Thr	Gly	Ser	Ser	Arg	Pro	Pro	Ala	740	745	750
Pro	Ser	Ser	His	Gly	Ser	Leu	Ala	Pro	Leu	Gly	Pro	Ser	Arg	Gly	Lys	755	760	765
Gly	Val	Gly	Ser	Thr	Phe	Glu	Ser	Phe	Arg	Ile	Asn	Ile	Pro	Gly	Asn	770	775	780
Met	Ala	His	Ser	Ser	Gln	Leu	Ser	Ser	Pro	Gly	Phe	Cys	Asn	Thr	Phe	785	790	795
Arg	Pro	Val	Asp	Asp	Lys	Glu	Gln	Arg	Lys	Glu	Asn	Pro	Ser	Pro	Leu	805	810	815
Phe	Ser	Ile	Lys	Lys	Thr	Lys	Gln	Leu	Arg	Ser	Glu	Val	Tyr	Asp	Pro	820	825	830
Ser	Asp	Pro	Thr	Gly	Ser	Asp	Ser	Ser	Ala	Pro	Gly	Ser	Ser	Pro	Glu	835	840	845
Arg	Ser	Gly	Pro	Gly	Leu	Leu	Pro	Ser	Glu	Ile	Thr	Arg	Thr	Ile	Ser	850	855	860
Ile	Asn	Ser	Pro	Lys	Ala	Gln	Thr	Val	Gln	Ala	Val	Arg	Cys	Val	Thr	865	870	875
Ser	Tyr	Thr	Val	Glu	Ser	Ile	Phe	Gly	Thr	Glu	Pro	Glu	Pro	Pro	Leu	885	890	895
Gly	Pro	Ser	Ser	Ala	Met	Ser	Lys	Leu	Arg	Gly	Ala	Val	Ala	Ala	Glu	900	905	910
Gly	Ala	Ser	Asp	Thr	Glu	Arg	Glu	Glu	Pro	Thr	Glu	Ser	Gln	Gly	Leu	915	920	925
Ala	Ala	Arg	Leu	Arg	Arg	Pro	Ser	Pro	Pro	Glu	Pro	Trp	Asp	Glu	Glu	930	935	940
Asp	Gly	Ala	Ser	Cys	Ser	Thr	Phe	Phe	Gly	Ser	Glu	Glu	Arg	Thr	Val	945	950	955
Thr	Cys	Val	Thr	Val	Val	Glu	Pro	Glu	Ala	Pro	Pro	Ser	Pro	Asp	Val	965	970	975
Leu	Gln	Ala	Ala	Thr	His	Arg	Val	Val	Glu	Leu	Arg	Pro	Pro	Ser	Arg	980	985	990
Ser	Arg	Ser	Thr	Ser	Ser	Ser	Arg	Ser	Arg	Lys	Lys	Ala	Lys	Arg	Lys	995	1000	1005
Arg	Val	Ser	Arg	Glu	His	Gly	Arg	Thr	Arg	Ser	Gly	Thr	Arg	Ser	Glu	1010	1015	1020
Ser	Arg	Asp	Arg	Ser	Ser	Arg	Ser	Ala	Ser	Pro	Ser	Val	Gly	Glu	Glu	1025	1030	1035
Arg	Pro	Arg	Arg	Gln	Arg	Ser	Lys	Ala	Lys	Ser	Arg	Arg	Ser	Ser	Ser	1045	1050	1055
Asp	Arg	Ser	Ser	Ser	Arg	Glu	Arg	Ala	Lys	Arg	Lys	Lys	Ala	Lys	Asp	1060	1065	1070
Lys	Ser	Arg	Glu	His	Arg	Arg	Gly	Pro	Trp	Gly	His	Ser	Arg	Arg	Thr	1075	1080	1085
Ser	Arg	Ser	Arg	Ser	Gly	Ser	Pro	Gly	Ser	Ser	Ser	Tyr	Glu	His	Tyr	1090	1095	1100
Glu	Ser	Arg	Lys	Lys	Lys	Lys	Arg	Arg	Ser	Ala	Ser	Arg	Pro	Arg	Gly	1105	1110	1115
Arg	Glu	Cys	Ser	Pro	Thr	Ser	Ser	Leu	Glu	Arg	Leu	Cys	Arg	His	Lys	1125	1130	1135
His	Gln	Arg	Glu	Arg	Ser	His	Glu	Arg	Pro	Asp	Arg	Lys	Glu	Ser	Val	1140	1145	1150
Ala	Trp	Pro	Arg	Asp	Arg	Arg	Lys	Arg	Arg	Ser	Arg	Ser	Pro	Ser	Ser	1155	1160	1165
Glu	His	Arg	Ala	Arg	Glu	His	Arg	Arg	Pro	Arg	Ser	Arg	Glu	Lys	Trp	1170	1175	1180
Pro	Gln	Thr	Arg	Ser	His	Ser	Pro	Glu	Arg	Lys	Gly	Ala	Val	Arg	Glu	1185	1190	1195
																		1200

Ala Ser Pro Ala Pro Leu Ala Gln Gly Glu Pro Gly Arg Glu Asp Leu
 1205 1210 1215
 Pro Thr Arg Leu Pro Ala Leu Gly Glu Ala His Val Ser Pro Glu Val
 1220 1225 1230
 Ala Thr Ala Asp Lys Ala Pro Leu Gln Ala Pro Pro Val Leu Glu Val
 1235 1240 1245
 Ala Ala Glu Cys Glu Pro Asp Asp Leu Asp Leu Asp Tyr Gly Asp Ser
 1250 1255 1260
 Val Glu Ala Gly His Val Phe Asp Asp Phe Ser Ser Asp Ala Val Phe
 1265 1270 1275 1280
 Ile Gln Leu Asp Asp Met Ser Ser Pro Pro Ser Pro Glu Ser Thr Asp
 1285 1290 1295
 Ser Ser Pro Glu Arg Asp Phe Pro Leu Lys Pro Ala Leu Pro Pro Ala
 1300 1305 1310
 Ser Leu Ala Val Ala Ala Ile Gln Arg Glu Val Ser Leu Met His Asp
 1315 1320 1325
 Glu Asp Pro Ser Gln Pro Pro Pro Leu Pro Glu Gly Thr Gln Glu Pro
 1330 1335 1340
 His Leu Leu Arg Pro Asp Ala Ala Glu Lys Ala Glu Ala Pro Ser Ser
 1345 1350 1355 1360
 Pro Asp Val Ala Pro Ala Gly Lys Glu Asp Ser Pro Ser Ala Ser Gly
 1365 1370 1375
 Arg Val Gln Glu Ala Ala Arg Pro Glu Glu Val Val Ser Gln Thr Pro
 1380 1385 1390
 Leu Leu Arg Ser Arg Ala Leu Val Lys Arg Val Thr Trp Asn Leu Gln
 1395 1400 1405
 Glu Ser Glu Ser Ser Ala Pro Ala Glu Asp Arg Ala Pro Arg Gly Thr
 1410 1415 1420
 Thr Ser Gln Ala Thr Glu Ala Pro Arg Arg Ser Leu Gly His Gly Gly
 1425 1430 1435 1440
 Cys Gly Pro His Arg Gly Gln Ala Gly Val Leu Arg Ala Ala Leu Ser
 1445 1450 1455
 Gln Ser Arg Ala Ser Gly Thr Arg Val Pro Arg His Arg Pro Leu Ser
 1460 1465 1470
 Gly Leu Gln Pro Arg Pro Ala Ala Cys Pro Gly Pro Ala Leu Lys His
 1475 1480 1485
 Pro Thr Leu Arg Thr Gly Gln Pro Ala His Gly Pro Val His Pro Ser
 1490 1495 1500
 Gly Glu Pro Ala Ala Ser Gly Leu Trp Gly Ser Thr Asp Pro Gly Pro
 1505 1510 1515 1520
 Ser Ala Arg Cys Pro Asp Pro Ser Leu Arg Ala Ser Gln Ser Ser His
 1525 1530 1535
 Cys Ser Gln Gln Leu Gly Gly Glu Asp Pro Gly Pro Gln Ala Ser Cys
 1540 1545 1550
 Gly Glu Asn Gln Glu Gly Gly Val His Glu Glu Ala Ala His Ala Gly
 1555 1560 1565
 Ala Cys Cys Gly Gly Gly Glu Ala Gly His Gln Ala Leu Leu Pro Glu
 1570 1575 1580
 Glu Gly Gly Asp Gln Gly Gly Val Gln Gly His Pro Ala Gln Gly Arg
 1585 1590 1595 1600
 Ala Glu Asp Leu Pro Gln Gln Glu Trp Arg Asp Gln Pro Arg Glu Gly
 1605 1610 1615
 Gly Gln Pro Gly Glu Gly Val Arg Gly Gln Val Gln Ala His Ala Gln
 1620 1625 1630
 Ala Gln Glu Thr Arg Gly Arg Gly Gly Ala Ala His Ala Gly Gly Arg
 1635 1640 1645
 Gly Leu Arg Pro Gly Asn His Gly Leu Cys Pro Gly Ser Cys Arg Glu
 1650 1655 1660
 Trp Arg Glu Ser Gly Pro Cys Pro Gly Ser Cys Arg Glu Trp Arg Glu
 1665 1670 1675 1680
 Ser Gly Pro Cys Pro Gly Ser Cys Arg Glu Trp Arg Glu Met Gly Gly
 1685 1690 1695
 Ile Thr Met Pro Ala Val Gly Phe Leu Arg *
 1700 1705 1706

<210> 1933
 <211> 312
 <212> PRT
 <213> Homo sapiens

<400> 1933
 Met Glu Ala Thr Arg Arg Arg Gln His Leu Gly Ala Thr Gly Gly Pro
 1 5 10 15
 Gly Ala Gln Leu Gly Ala Ser Phe Leu Gln Ala Arg His Gly Ser Val
 20 25 30
 Ser Ala Asp Glu Ala Ala Arg Thr Ala Pro Phe His Leu Asp Leu Trp
 35 40 45
 Phe Tyr Phe Thr Leu Gln Asn Trp Val Leu Asp Phe Gly Arg Pro Ile
 50 55 60
 Ala Met Leu Val Phe Pro Leu Glu Trp Phe Pro Leu Asn Lys Pro Ser
 65 70 75 80
 Val Gly Asp Tyr Phe His Met Ala Tyr Asn Val Ile Thr Pro Phe Leu
 85 90 95
 Leu Leu Lys Leu Ile Glu Arg Ser Pro Arg Thr Leu Pro Arg Ser Ile
 100 105 110
 Thr Tyr Val Ser Ile Ile Ile Phe Ile Met Gly Ala Ser Ile His Leu
 115 120 125
 Val Gly Asp Ser Val Asn His Arg Leu Leu Phe Ser Gly Tyr Gln His
 130 135 140
 His Leu Ser Val Arg Glu Asn Pro Ile Ile Lys Asn Leu Lys Pro Glu
 145 150 155 160
 Thr Leu Ile Asp Ser Phe Glu Leu Leu Tyr Tyr Tyr Asp Glu Tyr Leu
 165 170 175
 Gly His Cys Met Trp Tyr Ile Pro Phe Leu Ile Leu Phe Met Tyr
 180 185 190
 Phe Ser Gly Cys Phe Thr Ala Ser Lys Ala Glu Ser Leu Ile Pro Gly
 195 200 205
 Pro Ala Leu Leu Leu Val Ala Pro Ser Gly Leu Tyr Tyr Trp Tyr Leu
 210 215 220
 Val Thr Glu Gly Gln Ile Phe Ile Leu Phe Ile Phe Thr Phe Phe Ala
 225 230 235 240
 Met Leu Ala Leu Val Leu His Gln Lys Arg Lys Arg Leu Phe Leu Asp
 245 250 255
 Ser Asn Gly Leu Phe Leu Phe Ser Ser Phe Ala Leu Thr Leu Leu Leu
 260 265 270
 Val Ala Leu Trp Val Ala Trp Leu Trp Asn Asp Pro Val Leu Arg Lys
 275 280 285
 Lys Tyr Pro Gly Val Ile Tyr Val Pro Glu Pro Trp Ala Phe Tyr Thr
 290 295 300
 Leu His Val Ser Ser Arg His *
 305 310 311

<210> 1934
 <211> 352
 <212> PRT
 <213> Homo sapiens

<400> 1934
 Met Leu Glu Thr Leu Arg Glu Arg Leu Leu Ser Val Gln Gln Asp Phe
 1 5 10 15
 Thr Ser Gly Leu Lys Thr Leu Ser Asp Lys Ser Arg Glu Ala Lys Val
 20 25 30

Lys Ser Lys Pro Arg Thr Val Pro Phe Leu Pro Lys Tyr Ser Ala Gly
 35 40 45
 Leu Glu Leu Leu Ser Arg Tyr Glu Asp Thr Trp Ala Ala Leu His Arg
 50 55 60
 Arg Ala Lys Asp Cys Ala Ser Ala Gly Glu Leu Val Asp Ser Glu Val
 65 70 75 80
 Val Met Leu Ser Ala His Trp Glu Lys Lys Lys Thr Ser Leu Val Glu
 85 90 95
 Leu Gln Glu Gln Leu Gln Gln Leu Pro Ala Leu Ile Ala Asp Leu Glu
 100 105 110
 Ser Met Thr Ala Asn Leu Thr His Leu Glu Ala Ser Phe Glu Glu Val
 115 120 125
 Glu Asn Asn Leu Leu His Leu Glu Asp Leu Cys Gly Gln Cys Glu Leu
 130 135 140
 Glu Arg Cys Lys His Met Gln Ser Gln Gln Leu Glu Asn Tyr Lys Lys
 145 150 155 160
 Asn Lys Arg Lys Glu Leu Glu Thr Phe Lys Ala Glu Leu Asp Ala Glu
 165 170 175
 His Ala Gln Lys Val Leu Glu Met Glu His Thr Gln Gln Met Lys Leu
 180 185 190
 Lys Glu Arg Gln Lys Phe Phe Glu Glu Ala Phe Gln Gln Asp Met Glu
 195 200 205
 Gln Tyr Leu Ser Thr Gly Tyr Leu Gln Ile Ala Glu Arg Arg Glu Pro
 210 215 220
 Ile Gly Ser Met Ser Ser Met Glu Val Asn Val Asp Met Leu Glu Gln
 225 230 235 240
 Met Asp Leu Met Asp Ile Ser Asp Gln Glu Ala Leu Asp Val Phe Leu
 245 250 255
 Asn Ser Gly Gly Glu Glu Asn Thr Val Leu Ser Pro Ala Leu Gly Pro
 260 265 270
 Glu Ser Ser Thr Cys Gln Asn Glu Ile Thr Leu Gln Val Pro Asn Pro
 275 280 285
 Ser Glu Leu Arg Ala Lys Pro Pro Ser Ser Ser Ser Thr Cys Thr Asp
 290 295 300
 Ser Ala Thr Arg Asp Ile Ser Glu Gly Gly Glu Ser Pro Val Val Gln
 305 310 315 320
 Ser Asp Glu Glu Glu Val Gln Val Asp Thr Ala Leu Ala Thr Ser His
 325 330 335
 Thr Asp Arg Glu Ala Thr Pro Asp Gly Glu Asp Ser Asp Ser *
 340 345 350 351

<210> 1935

<211> 583

<212> PRT

<213> Homo sapiens

<400> 1935

Met Glu Ser Val Lys Gln Arg Ile Leu Ala Pro Gly Lys Glu Gly Leu
 1 5 10 15
 Lys Asn Phe Ala Gly Lys Ser Leu Gly Gln Ile Tyr Arg Val Leu Glu
 20 25 30
 Lys Lys Gln Asp Thr Gly Glu Thr Ile Glu Leu Thr Glu Asp Gly Lys
 35 40 45
 Pro Leu Glu Val Pro Glu Arg Lys Ala Pro Leu Cys Asp Cys Thr Cys
 50 55 60
 Phe Gly Leu Pro Arg Arg Tyr Ile Ile Ala Ile Met Ser Gly Leu Gly
 65 70 75 80
 Phe Cys Ile Ser Phe Gly Ile Arg Cys Asn Leu Gly Val Ala Ile Val
 85 90 95
 Asp Met Val Asn Asn Ser Thr Ile His Arg Gly Gly Lys Val Ile Lys
 100 105 110

Glu	Lys	Ala	Lys	Phe	Asn	Trp	Asp	Pro	Glu	Thr	Val	Gly	Met	Ile	His
		115					120					125			
Gly	Ser	Phe	Phe	Trp	Gly	Tyr	Ile	Ile	Thr	Gln	Ile	Pro	Gly	Gly	Tyr
		130				135					140				
Ile	Ala	Ser	Arg	Leu	Ala	Ala	Asp	Arg	Val	Phe	Gly	Ala	Ala	Ile	Leu
145					150					155					160
Leu	Thr	Ser	Thr	Leu	Asn	Met	Leu	Ile	Pro	Ser	Ala	Ala	Arg	Val	His
				165					170					175	
Tyr	Gly	Cys	Val	Ile	Phe	Val	Arg	Ile	Leu	Gln	Gly	Leu	Val	Glu	Gly
			180					185				190			
Val	Thr	Tyr	Pro	Ala	Cys	His	Gly	Ile	Trp	Ser	Lys	Trp	Ala	Pro	Pro
		195					200					205			
Leu	Glu	Arg	Ser	Arg	Leu	Ala	Thr	Thr	Ser	Phe	Cys	Gly	Ser	Tyr	Ala
	210					215					220				
Gly	Ala	Val	Ile	Ala	Met	Pro	Leu	Ala	Gly	Ile	Leu	Val	Gln	Tyr	Thr
225					230					235					240
Gly	Trp	Ser	Ser	Val	Phe	Tyr	Val	Tyr	Gly	Ser	Phe	Gly	Met	Val	Trp
				245					250					255	
Tyr	Met	Phe	Trp	Leu	Leu	Val	Ser	Tyr	Glu	Ser	Pro	Ala	Lys	His	Pro
			260					265					270		
Thr	Ile	Thr	Asp	Glu	Glu	Arg	Arg	Tyr	Thr	Glu	Glu	Ser	Ile	Gly	Glu
		275					280					285			
Ser	Ala	Asn	Leu	Leu	Gly	Ala	Met	Glu	Lys	Phe	Lys	Thr	Pro	Trp	Arg
	290					295					300				
Lys	Phe	Phe	Thr	Ser	Met	Pro	Val	Tyr	Ala	Ile	Ile	Val	Ala	Asn	Phe
305					310					315					320
Cys	Arg	Ser	Trp	Thr	Phe	Tyr	Leu	Leu	Leu	Ile	Ser	Gln	Pro	Ala	Tyr
				325					330					335	
Phe	Glu	Glu	Val	Phe	Gly	Phe	Glu	Ile	Ser	Lys	Val	Gly	Met	Leu	Ser
			340					345				350			
Ala	Val	Pro	His	Leu	Val	Met	Thr	Ile	Ile	Val	Pro	Ile	Gly	Gly	Gln
		355					360					365			
Ile	Ala	Asp	Phe	Leu	Arg	Ser	Lys	Gln	Ile	Leu	Ser	Thr	Thr	Thr	Val
	370					375				380					
Arg	Lys	Ile	Met	Asn	Cys	Gly	Gly	Phe	Gly	Met	Glu	Ala	Thr	Leu	Leu
385					390					395					400
Leu	Val	Val	Gly	Tyr	Ser	His	Thr	Arg	Gly	Val	Ala	Ile	Ser	Phe	Leu
				405					410					415	
Val	Leu	Ala	Val	Gly	Phe	Ser	Gly	Phe	Ala	Ile	Ser	Gly	Phe	Asn	Val
			420					425				430			
Asn	His	Leu	Asp	Ile	Ala	Pro	Arg	Tyr	Ala	Ser	Ile	Leu	Met	Gly	Ile
	435						440					445			
Ser	Asn	Gly	Val	Gly	Thr	Leu	Ser	Gly	Met	Val	Cys	Pro	Ile	Ile	Val
	450					455					460				
Gly	Ala	Met	Thr	Lys	Asn	Lys	Ser	Arg	Glu	Glu	Trp	Gln	Tyr	Val	Phe
465					470					475					480
Leu	Ile	Ala	Ala	Leu	Val	His	Tyr	Gly	Gly	Val	Ile	Phe	Tyr	Ala	Ile
				485					490					495	
Phe	Ala	Ser	Gly	Glu	Lys	Gln	Pro	Trp	Ala	Asp	Pro	Glu	Glu	Thr	Ser
			500					505				510			
Glu	Glu	Lys	Cys	Gly	Phe	Ile	His	Glu	Asp	Glu	Leu	Asp	Glu	Glu	Thr
		515					520					525			
Gly	Asp	Ile	Thr	Gln	Asn	Tyr	Ile	Asn	Tyr	Gly	Thr	Thr	Lys	Ser	Tyr
	530					535					540				
Gly	Ala	Thr	Thr	Gln	Ala	Asn	Gly	Gly	Trp	Pro	Ser	Gly	Trp	Glu	Lys
545					550					555					560
Lys	Glu	Glu	Phe	Val	Gln	Gly	Glu	Val	Gln	Asp	Ser	His	Ser	Tyr	Lys
				565					570					575	
Asp	Arg	Val	Asp	Tyr	Ser	*									
		580			582										

<211> 330
 <212> PRT
 <213> Homo sapiens

<400> 1936
 Met Ser Val Pro Glu Glu Glu Glu Arg Leu Leu Pro Leu Thr Gln Arg
 1 5 10 15
 Trp Pro Arg Ala Ser Lys Phe Leu Leu Ser Gly Cys Ala Ala Thr Val
 20 25 30
 Ala Glu Leu Ala Thr Phe Pro Leu Asp Leu Thr Lys Thr Arg Leu Gln
 35 40 45
 Met Gln Gly Glu Ala Ala Leu Ala Arg Leu Gly Asp Gly Ala Arg Glu
 50 55 60
 Ser Ala Pro Tyr Arg Gly Met Val Arg Thr Ala Leu Gly Ile Ile Glu
 65 70 75 80
 Glu Glu Gly Phe Leu Lys Leu Trp Gln Gly Val Thr Pro Ala Ile Tyr
 85 90 95
 Arg His Val Val Tyr Ser Gly Gly Arg Met Val Thr Tyr Glu His Leu
 100 105 110
 Arg Glu Val Val Phe Gly Lys Ser Glu Asp Glu His Tyr Pro Leu Trp
 115 120 125
 Lys Ser Val Ile Gly Gly Met Met Ala Gly Val Ile Gly Gln Phe Leu
 130 135 140
 Ala Asn Pro Thr Asp Leu Val Lys Val Gln Met Gln Met Glu Gly Lys
 145 150 155 160
 Arg Lys Leu Glu Gly Lys Pro Leu Arg Phe Arg Gly Val His His Ala
 165 170 175
 Phe Ala Lys Ile Leu Ala Glu Gly Gly Ile Arg Gly Leu Trp Ala Gly
 180 185 190
 Trp Val Pro Asn Ile Gln Arg Ala Ala Leu Val Asn Met Gly Asp Leu
 195 200 205
 Thr Thr Tyr Asp Thr Val Lys His Tyr Leu Val Leu Asn Thr Pro Leu
 210 215 220
 Glu Asp Asn Ile Met Thr His Gly Leu Ser Ser Leu Cys Ser Gly Leu
 225 230 235 240
 Val Ala Ser Ile Leu Gly Thr Pro Ala Asp Val Ile Lys Ser Arg Ile
 245 250 255
 Met Asn Gln Pro Arg Asp Lys Gln Gly Arg Gly Leu Leu Tyr Lys Ser
 260 265 270
 Ser Thr Asp Cys Leu Ile Gln Ala Val Gln Gly Glu Gly Phe Met Ser
 275 280 285
 Leu Tyr Lys Gly Phe Leu Pro Ser Trp Leu Arg Met Val Lys Leu Gly
 290 295 300
 Leu Leu Pro Leu Phe Phe Phe Phe Val Leu Lys Leu Leu Leu Ile Tyr
 305 310 315 320
 Lys His Phe Pro Phe Ser Leu Leu Val *

<210> 1937
 <211> 496
 <212> PRT
 <213> Homo sapiens

<400> 1937
 Met Arg Val Gly Ala Glu Tyr Gln Ala Arg Ile Pro Glu Phe Asp Pro
 1 5 10 15
 Gly Ala Thr Lys Tyr Thr Asp Lys Asp Asn Gly Gly Met Leu Val Trp
 20 25 30
 Ser Pro Tyr His Ser Ile Pro Asp Ala Lys Leu Asp Glu Tyr Ile Ala
 35 40 45

Ile	Ala	Lys	Glu	Lys	His	Gly	Tyr	Asn	Val	Glu	Gln	Ala	Leu	Gly	Met	50	55	60
Leu	Phe	Trp	His	Lys	His	Asn	Ile	Glu	Lys	Ser	Leu	Ala	Asp	Leu	Pro	65	70	75
Asn	Phe	Thr	Pro	Phe	Pro	Asp	Glu	Trp	Thr	Val	Glu	Asp	Lys	Val	Leu	85	90	95
Phe	Glu	Gln	Ala	Phe	Ser	Phe	His	Gly	Lys	Ser	Phe	His	Arg	Ile	Gln	100	105	110
Gln	Met	Leu	Pro	Asp	Lys	Thr	Ile	Ala	Ser	Leu	Val	Lys	Tyr	Tyr	Tyr	115	120	125
Ser	Trp	Lys	Lys	Thr	Arg	Ser	Arg	Thr	Ser	Leu	Met	Asp	Arg	Gln	Ala	130	135	140
Arg	Lys	Leu	Ala	Asn	Arg	His	Asn	Gln	Gly	Asp	Ser	Asp	Asp	Asp	Val	145	150	155
Glu	Glu	Thr	His	Pro	Met	Asp	Gly	Asn	Asp	Ser	Asp	Tyr	Asp	Pro	Lys	165	170	175
Lys	Glu	Ala	Lys	Lys	Glu	Gly	Asn	Thr	Glu	Gln	Pro	Val	Gln	Thr	Ser	180	185	190
Lys	Ile	Gly	Leu	Gly	Arg	Arg	Glu	Tyr	Gln	Ser	Leu	Gln	His	Arg	His	195	200	205
His	Ser	Gln	Arg	Ser	Lys	Cys	Arg	Pro	Pro	Lys	Gly	Met	Tyr	Leu	Thr	210	215	220
Gln	Glu	Asp	Val	Val	Ala	Val	Ser	Cys	Ser	Pro	Asn	Ala	Ala	Asn	Thr	225	230	235
Ile	Leu	Arg	Gln	Leu	Asp	Met	Glu	Leu	Ile	Ser	Leu	Lys	Arg	Gln	Val	245	250	255
Gln	Asn	Ala	Lys	Gln	Val	Asn	Ser	Ala	Leu	Lys	Gln	Lys	Met	Glu	Gly	260	265	270
Gly	Ile	Glu	Glu	Phe	Lys	Pro	Pro	Glu	Ser	Asn	Gln	Lys	Ile	Asn	Ala	275	280	285
Arg	Trp	Thr	Thr	Glu	Glu	Gln	Leu	Leu	Ala	Val	Gln	Gly	Val	Arg	Lys	290	295	300
Tyr	Gly	Lys	Asp	Phe	Gln	Ala	Ile	Ala	Asp	Val	Ile	Gly	Asn	Lys	Thr	305	310	315
Val	Gly	Gln	Val	Lys	Asn	Phe	Phe	Val	Asn	Tyr	Arg	Arg	Arg	Phe	Asn	325	330	335
Leu	Glu	Glu	Val	Leu	Gln	Glu	Trp	Glu	Ala	Glu	Gln	Gly	Thr	Gln	Ala	340	345	350
Ser	Asn	Gly	Asp	Ala	Ser	Thr	Leu	Gly	Glu	Glu	Thr	Lys	Ser	Ala	Ser	355	360	365
Asn	Val	Pro	Ser	Gly	Lys	Ser	Thr	Asp	Glu	Glu	Glu	Glu	Ala	Gln	Thr	370	375	380
Pro	Gln	Ala	Pro	Arg	Thr	Leu	Gly	Pro	Ser	Pro	Pro	Ala	Pro	Ser	Ser	385	390	395
Thr	Pro	Thr	Pro	Thr	Ala	Pro	Ile	Ala	Thr	Leu	Asn	Gln	Pro	Pro	Pro	405	410	415
Leu	Leu	Arg	Pro	Thr	Leu	Pro	Ala	Ala	Pro	Ala	Leu	His	Arg	Gln	Pro	420	425	430
Pro	Pro	Leu	Gln	Gln	Gln	Ala	Arg	Phe	Ile	Gln	Pro	Arg	Pro	Thr	Leu	435	440	445
Asn	Gln	Pro	Pro	Pro	Pro	Leu	Ile	Arg	Pro	Ala	Asn	Ser	Met	Pro	Pro	450	455	460
Arg	Leu	Asn	Pro	Arg	Pro	Val	Leu	Ser	Thr	Val	Gly	Gly	Gln	Gln	Pro	465	470	475
Pro	Ser	Leu	Ile	Gly	Ile	Gln	Thr	Asp	Ser	Gln	Ser	Ser	Leu	His	*	485	490	495

<210> 1938

<211> 290

<212> PRT

<213> Homo sapiens

<400> 1938

```

Met Pro Gly Thr Gly Val Gln Glu Gly Cys Leu Val Thr Arg Gln Ile
 1          5          10          15
Gln Gln Pro Gln Glu Leu Leu Ser Ala Val Arg Asn Ser Val His Pro
          20          25          30
Pro Gln Glu Gln Pro Arg Leu Glu Gly Ser Lys Leu Ser Ser Ser Pro
          35          40          45
Ala Ser Pro Ser Ser Ser Leu Gln Asn Ser Thr Leu Gln Pro Asp Ala
          50          55          60
Phe Pro Pro Gly Leu Leu His Ser Gly Asn Asn Gln Ile Thr Ala Glu
65          70          75          80
Arg Lys Val Cys Asn Cys Cys Ser Gln Glu Leu Glu Thr Ser Phe Thr
          85          90          95
Tyr Val Asp Lys Asn Ile Asn Leu Glu Gln Arg Asn Arg Ser Ser Pro
          100          105          110
Ser Ala Lys Gly His Asn His Pro Gly Glu Leu Gly Trp Glu Asn Pro
          115          120          125
Asn Glu Trp Ser Gln Glu Ala Ala Ile Ser Leu Ile Ser Glu Glu Glu
130          135          140
Asp Asp Thr Ser Ser Glu Ala Thr Ser Ser Gly Lys Ser Ile Asp Tyr
145          150          155          160
Gly Phe Ile Ser Ala Ile Leu Phe Leu Val Thr Gly Ile Leu Leu Val
          165          170          175
Ile Ile Ser Tyr Ile Val Pro Arg Glu Val Thr Val Asp Pro Asn Thr
          180          185          190
Val Ala Ala Arg Glu Met Glu Arg Leu Glu Lys Glu Ser Ala Arg Leu
          195          200          205
Gly Ala His Leu Asp Arg Cys Val Ile Ala Gly Leu Cys Leu Leu Thr
210          215          220
Leu Gly Gly Val Ile Leu Ser Cys Leu Leu Met Met Ser Met Trp Lys
225          230          235          240
Gly Glu Leu Tyr Arg Arg Asn Arg Phe Ala Ser Ser Lys Glu Ser Ala
          245          250          255
Lys Leu Tyr Gly Ser Phe Asn Phe Arg Met Lys Thr Ser Thr Asn Glu
          260          265          270
Asn Thr Leu Glu Leu Ser Leu Val Glu Glu Asp Ala Leu Ala Val Gln
          275          280          285
Ser *
289

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<210> 1939

<211> 460

<212> PRT

<213> Homo sapiens

<400> 1939

```

Met Ser Asn Cys Leu Gln Asn Phe Leu Lys Ile Thr Ser Thr Arg Leu
 1          5          10          15
Leu Cys Ser Arg Leu Cys Gln Gln Leu Arg Ser Lys Arg Lys Phe Phe
          20          25          30
Gly Thr Val Pro Ile Ser Arg Leu His Arg Arg Val Val Ile Thr Gly
          35          40          45
Ile Gly Leu Val Thr Pro Leu Gly Val Gly Thr His Leu Val Trp Asp
          50          55          60
Arg Leu Ile Gly Gly Glu Ser Gly Ile Val Ser Leu Val Gly Glu Glu
65          70          75          80
Tyr Lys Ser Ile Pro Cys Ser Val Ala Ala Tyr Val Pro Arg Gly Ser
          85          90          95
Asp Glu Gly Gln Phe Asn Glu Gln Asn Phe Val Ser Lys Ser Asp Ile
          100          105          110

```


Lys Ser Met Ser Ser Pro Thr Ile Met Ala Ile Gly Ala Ala Glu Leu
 115 120 125
 Ala Met Lys Asp Ser Gly Trp His Pro Gln Ser Glu Ala Asp Gln Val
 130 135 140
 Ala Thr Gly Val Ala Ile Gly Met Gly Met Ile Pro Leu Glu Val Val
 145 150 155 160
 Ser Glu Thr Ala Leu Asn Phe Gln Thr Lys Gly Tyr Asn Lys Val Ser
 165 170 175
 Pro Phe Phe Val Pro Lys Ile Leu Val Asn Met Ala Ala Gly Gln Val
 180 185 190
 Ser Ile Arg Tyr Lys Leu Lys Gly Pro Asn His Ala Val Ser Thr Ala
 195 200 205
 Cys Thr Thr Gly Ala His Ala Val Gly Asp Ser Phe Arg Phe Ile Ala
 210 215 220
 His Gly Asp Ala Asp Val Met Val Ala Gly Gly Thr Asp Ser Cys Ile
 225 230 235 240
 Ser Pro Leu Ser Leu Ala Gly Phe Ser Arg Ala Arg Ala Leu Ser Thr
 245 250 255
 Asn Ser Asp Pro Lys Leu Ala Cys Arg Pro Phe His Pro Lys Arg Asp
 260 265 270
 Gly Phe Val Met Gly Glu Gly Ala Ala Val Leu Val Leu Glu Glu Tyr
 275 280 285
 Glu His Ala Val Gln Arg Arg Ala Arg Ile Tyr Ala Glu Val Leu Gly
 290 295 300
 Tyr Gly Leu Ser Gly Asp Ala Gly His Ile Thr Ala Pro Asp Pro Glu
 305 310 315 320
 Gly Glu Gly Ala Leu Arg Cys Met Ala Ala Ala Leu Lys Asp Ala Gly
 325 330 335
 Val Gln Pro Glu Glu Ile Ser Tyr Ile Asn Ala His Ala Thr Ser Thr
 340 345 350
 Pro Leu Gly Asp Ala Ala Glu Asn Lys Ala Ile Lys His Leu Phe Lys
 355 360 365
 Asp His Ala Tyr Ala Leu Ala Val Ser Ser Thr Lys Gly Ala Thr Gly
 370 375 380
 His Leu Leu Gly Ala Ala Gly Ala Val Glu Ala Ala Phe Thr Thr Leu
 385 390 395 400
 Ala Cys Tyr Tyr Gln Lys Leu Pro Pro Thr Leu Asn Leu Asp Cys Ser
 405 410 415
 Glu Pro Glu Phe Asp Leu Asn Tyr Val Pro Leu Lys Ala Gln Glu Trp
 420 425 430
 Lys Thr Glu Lys Arg Phe Ile Gly Leu Thr Asn Ser Phe Gly Phe Gly
 435 440 445
 Gly Thr Asn Ala Thr Leu Cys Ile Ala Gly Leu *
 450 455 459

<210> 1940

<211> 167

<212> PRT

<213> Homo sapiens

<400> 1940

Met Cys Thr Gly Phe Leu Cys Asn Phe Ser Thr Glu Ser Asn Gly Phe
 1 5 10 15
 Ser Gln Leu Phe Pro Gly Leu Arg Pro Trp Leu Ala Val Leu Ala Gly
 20 25 30
 Leu Phe Tyr Leu Pro Val Tyr Arg Asp Tyr Ile Met Ser Phe Gly Leu
 35 40 45
 Cys Pro Val Ser Arg Gln Ser Leu Asp Phe Ile Leu Ser Gln Pro Gln
 50 55 60
 Leu Gly Gln Ala Val Val Ile Met Val Gly Gly Ala His Glu Ala Leu
 65 70 75 80

Tyr	Ser	Val	Pro	Gly	Glu	His	Cys	Leu	Thr	Leu	Gln	Lys	Arg	Lys	Gly
				85					90					95	
Phe	Val	Arg	Leu	Ala	Leu	Arg	His	Gly	Ala	Ser	Leu	Val	Pro	Val	Tyr
			100					105					110		
Ser	Phe	Gly	Glu	Asn	Asp	Ile	Phe	Arg	Leu	Lys	Ala	Phe	Ala	Thr	Gly
		115					120					125			
Ser	Trp	Gln	His	Trp	Cys	Gln	Leu	Thr	Phe	Lys	Lys	Leu	Met	Gly	Phe
	130					135					140				
Ser	Pro	Cys	Ile	Phe	Trp	Gly	Arg	Gly	Ile	Phe	Ala	Thr	Thr	Thr	Trp
145					150					155					160
Ser	Leu	His	Pro	Phe	Gly	*									
				165	166										

<210> 1941
 <211> 264
 <212> PRT
 <213> Homo sapiens

<400> 1941

Met	Gly	Asp	Ile	Pro	Val	Val	Gly	Leu	Ser	Ser	Trp	Lys	Ala	Ser	Pro
1				5					10					15	
Gly	Lys	Val	Thr	Glu	Ala	Val	Lys	Glu	Ala	Ile	Asp	Ala	Gly	Tyr	Arg
		20					25					30			
His	Phe	Asp	Cys	Ala	Tyr	Phe	Tyr	His	Asn	Glu	Arg	Glu	Val	Gly	Ala
		35					40					45			
Gly	Ile	Arg	Cys	Lys	Ile	Lys	Glu	Gly	Ala	Val	Arg	Arg	Glu	Asp	Leu
	50					55					60				
Leu	Ile	Ala	Thr	Lys	Leu	Trp	Cys	Thr	Cys	His	Lys	Lys	Ser	Leu	Val
65				70					75						80
Glu	Thr	Ala	Cys	Arg	Lys	Ser	Leu	Lys	Ala	Leu	Lys	Leu	Asn	Tyr	Leu
				85					90					95	
Asp	Leu	Tyr	Leu	Ile	His	Trp	Pro	Met	Gly	Phe	Lys	Pro	Pro	His	Pro
		100					105						110		
Glu	Trp	Ile	Met	Ser	Cys	Ser	Glu	Leu	Ser	Phe	Cys	Leu	Ser	His	Pro
	115						120					125			
Arg	Val	Gln	Asp	Leu	Pro	Leu	Asp	Glu	Ser	Asn	Met	Val	Ile	Pro	Ser
	130					135					140				
Asp	Thr	Asp	Phe	Leu	Asp	Thr	Trp	Glu	Ala	Met	Glu	Asp	Leu	Val	Ile
145				150						155					160
Thr	Gly	Leu	Val	Lys	Asn	Ile	Gly	Val	Ser	Asn	Phe	Asn	His	Glu	Gln
			165					170						175	
Leu	Glu	Arg	Leu	Leu	Asn	Lys	Pro	Gly	Leu	Arg	Phe	Lys	Pro	Leu	Thr
		180					185						190		
Asn	Gln	Ile	Leu	Ile	Arg	Phe	Gln	Ile	Gln	Arg	Asn	Val	Ile	Val	Ile
	195						200					205			
Pro	Gly	Ser	Ile	Thr	Pro	Ser	His	Ile	Lys	Glu	Asn	Ile	Gln	Val	Phe
	210					215					220				
Asp	Phe	Glu	Leu	Thr	Gln	His	Asp	Met	Asp	Asn	Ile	Leu	Ser	Leu	Asn
225				230						235					240
Arg	Asn	Leu	Arg	Leu	Ala	Met	Phe	Pro	Ile	Thr	Lys	Asn	His	Lys	Asp
			245					250						255	
Tyr	Pro	Phe	His	Ile	Glu	Tyr	*								
			260			263									

<210> 1942
 <211> 1025
 <212> PRT
 <213> Homo sapiens

<400> 1942

```

Met His Arg Lys Lys Val Asp Asn Arg Ile Arg Ile Leu Ile Glu Asn
 1          5          10          15
Gly Val Ala Glu Arg Gln Arg Ser Leu Phe Val Val Val Gly Asp Arg
          20          25          30
Gly Lys Asp Gln Val Val Ile Leu His His Met Leu Ser Lys Ala Thr
          35          40          45
Val Lys Ala Arg Pro Ser Val Leu Trp Cys Tyr Lys Lys Glu Leu Gly
          50          55          60
Phe Ser Ser His Arg Lys Lys Arg Met Arg Gln Leu Gln Lys Lys Ile
 65          70          75          80
Lys Asn Gly Thr Leu Asn Ile Lys Gln Asp Asp Pro Phe Glu Leu Phe
          85          90          95
Ile Ala Ala Thr Asn Ile Arg Tyr Cys Tyr Tyr Asn Glu Thr His Lys
          100          105          110
Ile Leu Gly Asn Thr Phe Gly Met Cys Val Leu Gln Asp Phe Glu Ala
          115          120          125
Leu Thr Pro Asn Leu Leu Ala Arg Thr Val Glu Thr Val Glu Gly Gly
          130          135          140
Gly Leu Val Val Ile Leu Leu Arg Thr Met Asn Ser Leu Lys Gln Leu
145          150          155          160
Tyr Thr Val Thr Met Asp Val His Ser Arg Tyr Arg Thr Glu Ala His
          165          170          175
Gln Asp Val Val Gly Arg Phe Asn Glu Arg Phe Ile Leu Ser Leu Ala
          180          185          190
Ser Cys Lys Lys Cys Leu Val Ile Asp Asp Gln Leu Asn Ile Leu Pro
          195          200          205
Ile Ser Ser His Val Ala Thr Met Glu Ala Leu Pro Pro Gln Thr Pro
          210          215          220
Asp Glu Ser Leu Gly Pro Ser Asp Leu Glu Leu Arg Glu Leu Lys Glu
225          230          235          240
Ser Leu Gln Asp Thr Gln Pro Val Gly Val Leu Val Asp Cys Cys Lys
          245          250          255
Thr Leu Asp Gln Ala Lys Ala Val Leu Lys Phe Ile Glu Gly Ile Ser
          260          265          270
Glu Lys Thr Leu Arg Ser Thr Val Ala Leu Thr Ala Ala Arg Gly Arg
          275          280          285
Gly Lys Ser Ala Ala Leu Gly Leu Ala Ile Ala Gly Ala Val Ala Phe
          290          295          300
Gly Tyr Ser Asn Ile Phe Val Thr Ser Pro Ser Pro Asp Asn Leu His
305          310          315          320
Thr Leu Phe Glu Phe Val Phe Lys Gly Phe Asp Ala Leu Gln Tyr Gln
          325          330          335
Glu His Leu Asp Tyr Glu Ile Ile Gln Ser Leu Asn Pro Glu Phe Asn
          340          345          350
Lys Ala Val Ile Arg Val Asn Val Phe Arg Glu His Arg Gln Thr Ile
          355          360          365
Gln Tyr Ile His Pro Ala Asp Ala Val Lys Leu Gly Gln Ala Glu Leu
          370          375          380
Val Val Ile Asp Glu Ala Ala Ala Ile Pro Leu Pro Leu Val Lys Ser
385          390          395          400
Leu Leu Gly Pro Tyr Leu Val Phe Met Ala Ser Thr Ile Asn Gly Tyr
          405          410          415
Glu Gly Thr Gly Arg Ser Leu Ser Leu Lys Leu Ile Gln Gln Leu Arg
          420          425          430
Gln Gln Ser Ala Gln Ser Gln Val Ser Thr Thr Ala Glu Asn Lys Thr
          435          440          445
Thr Thr Thr Ala Arg Leu Ala Ser Ala Arg Thr Leu His Glu Val Ser
          450          455          460
Leu Gln Glu Ser Ile Arg Tyr Ala Pro Gly Asp Ala Val Glu Lys Trp
465          470          475          480
Leu Asn Asp Leu Leu Cys Leu Asp Cys Leu Asn Ile Thr Arg Ile Val
          485          490          495

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3864

Lys Asn Arg Glu Thr Lys Asn Lys Lys Asp Met Lys Leu Lys Arg Lys
 1010 1015 1020
 Lys
 1025

<210> 1943
 <211> 736
 <212> PRT
 <213> Homo sapiens

<400> 1943
 Met Ala Ala Gly Gly Ala Val Ala Ala Ala Pro Glu Cys Arg Leu Leu
 1 5 10 15
 Pro Tyr Ala Leu His Lys Trp Ser Ser Phe Ser Ser Thr Tyr Leu Pro
 20 25 30
 Glu Asn Ile Leu Val Asp Lys Pro Asn Asp Gln Ser Ser Arg Trp Ser
 35 40 45
 Ser Glu Ser Asn Tyr Pro Pro Gln Tyr Leu Ile Leu Lys Leu Glu Arg
 50 55 60
 Pro Ala Ile Val Gln Asn Ile Thr Phe Gly Lys Tyr Glu Lys Thr His
 65 70 75 80
 Val Cys Asn Leu Lys Lys Phe Lys Val Phe Gly Gly Met Asn Glu Glu
 85 90 95
 Asn Met Thr Glu Leu Leu Ser Ser Gly Leu Lys Asn Asp Tyr Asn Lys
 100 105 110
 Glu Thr Phe Thr Leu Lys His Lys Ile Asp Glu Gln Met Phe Pro Cys
 115 120 125
 Arg Phe Ile Lys Ile Val Pro Leu Leu Ser Trp Gly Pro Ser Phe Asn
 130 135 140
 Phe Ser Ile Trp Tyr Val Glu Leu Ser Gly Ile Asp Asp Pro Asp Ile
 145 150 155 160
 Val Gln Pro Cys Leu Asn Trp Tyr Ser Lys Tyr Arg Glu Gln Glu Ala
 165 170 175
 Ile Arg Leu Cys Leu Lys His Phe Arg Gln His Asn Tyr Thr Glu Ala
 180 185 190
 Phe Glu Ser Leu Gln Lys Lys Thr Lys Ile Ala Leu Glu His Pro Met
 195 200 205
 Ser Thr Asp Ile His Asp Lys Leu Val Leu Lys Gly Asp Phe Asp Ala
 210 215 220
 Cys Glu Glu Leu Ile Glu Lys Ala Val Asn Asp Gly Leu Phe Asn Gln
 225 230 235 240
 Tyr Ile Ser Gln Gln Glu Tyr Lys Pro Arg Trp Ser Gln Ile Ile Pro
 245 250 255
 Lys Ser Thr Lys Gly Asp Gly Glu Asp Asn Arg Pro Gly Met Arg Gly
 260 265 270
 Gly His Gln Met Val Ile Asp Val Gln Thr Glu Thr Val Tyr Leu Phe
 275 280 285
 Gly Gly Trp Asp Gly Thr Gln Asp Leu Ala Asp Phe Trp Ala Tyr Ser
 290 295 300
 Val Lys Glu Asn Gln Trp Thr Cys Ile Ser Arg Asp Thr Glu Lys Glu
 305 310 315 320
 Asn Gly Pro Ser Ala Arg Ser Cys His Lys Met Cys Ile Asp Ile Gln
 325 330 335
 Arg Arg Gln Ile Tyr Thr Leu Gly Arg Tyr Leu Asp Ser Ser Val Arg
 340 345 350
 Asn Ser Lys Ser Leu Lys Ser Asp Phe Tyr Arg Tyr Asp Ile Asp Thr
 355 360 365
 Asn Thr Trp Met Leu Leu Ser Glu Asp Thr Ala Ala Asp Gly Gly Pro
 370 375 380
 Lys Leu Val Phe Asp His Gln Met Cys Met Asp Ser Glu Lys His Met
 385 390 395 400


```

Ile Tyr Thr Phe Gly Gly Arg Ile Leu Thr Cys Asn Gly Ser Val Asp
      405      410      415
Asp Ser Arg Ala Ser Glu Pro Gln Phe Ser Gly Leu Phe Ala Phe Asn
      420      425      430
Cys Gln Cys Gln Thr Trp Lys Leu Leu Arg Glu Asp Ser Cys Asn Ala
      435      440      445
Gly Pro Glu Asp Ile Gln Ser Arg Ile Gly His Cys Met Leu Phe His
      450      455      460
Ser Lys Asn Arg Cys Leu Tyr Val Phe Gly Gly Gln Arg Ser Lys Thr
465      470      475      480
Tyr Leu Asn Asp Phe Phe Ser Tyr Asp Val Asp Ser Asp His Val Asp
      485      490      495
Ile Ile Ser Asp Gly Thr Lys Lys Asp Ser Gly Met Val Pro Met Thr
      500      505      510
Gly Phe Thr Gln Arg Ala Thr Ile Asp Pro Glu Leu Asn Glu Ile His
      515      520      525
Val Leu Ser Gly Leu Ser Lys Asp Lys Glu Lys Arg Glu Glu Asn Val
      530      535      540
Arg Asn Ser Phe Trp Ile Tyr Asp Ile Val Arg Asn Ser Trp Ser Cys
545      550      555      560
Val Tyr Lys Asn Asp Gln Ala Ala Lys Asp Asn Pro Thr Lys Ser Leu
      565      570      575
Gln Glu Glu Glu Pro Cys Pro Arg Phe Ala His Gln Leu Val Tyr Asp
      580      585      590
Glu Leu His Lys Val His Tyr Leu Phe Gly Gly Asn Pro Gly Lys Ser
      595      600      605
Cys Ser Pro Lys Met Arg Leu Asp Asp Phe Trp Ser Leu Lys Leu Cys
      610      615      620
Arg Pro Ser Lys Asp Tyr Leu Leu Arg His Cys Lys Tyr Leu Ile Arg
625      630      635      640
Lys His Arg Phe Glu Glu Lys Ala Gln Val Asp Pro Leu Ser Ala Leu
      645      650      655
Lys Tyr Leu Gln Asn Asp Leu Tyr Ile Thr Val Asp His Ser Asp Pro
      660      665      670
Glu Glu Thr Lys Glu Phe Gln Leu Leu Ala Ser Ala Leu Phe Lys Ser
      675      680      685
Gly Ser Asp Phe Thr Ala Leu Gly Phe Ser Asp Val Asp His Thr Tyr
      690      695      700
Ala Gln Arg Thr Gln Leu Phe Asp Thr Leu Val Asn Phe Phe Pro Asp
705      710      715      720
Ser Met Thr Pro Pro Lys Gly Asn Leu Val Asp Leu Ile Thr Leu *
      725      730      735

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<210> 1944

<211> 132

<212> PRT

<213> Homo sapiens

<400> 1944

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Met Ala Pro Ser Leu Trp Lys Gly Leu Val Gly Ile Gly Leu Phe Ala
  1      5      10      15
Leu Ala His Ala Ala Phe Ser Ala Ala Gln His Arg Ser Tyr Met Arg
      20      25      30
Leu Thr Glu Lys Glu Asp Glu Ser Leu Pro Ile Asp Ile Val Pro Gln
      35      40      45
Thr Leu Leu Ala Phe Ala Val Thr Cys Tyr Gly Ile Val His Ile Ala
      50      55      60
Gly Glu Phe Lys Asp Met Asp Ala Thr Ser Glu Leu Lys Asn Lys Thr
      65      70      75      80
Phe Asp Thr Leu Arg Asn His Pro Ser Phe Tyr Val Phe Asn His Arg
      85      90      95

```


Gly Arg Val Leu Phe Arg Pro Ser Asp Thr Ala Asn Ser Ser Asn Gln
 100 105 110
 Asp Ala Leu Ser Ser Asn Thr Ser Leu Lys Leu Arg Lys Leu Glu Ser
 115 120 125
 Leu Arg Arg *
 130 131

<210> 1945
 <211> 235
 <212> PRT
 <213> Homo sapiens

<400> 1945
 Met Arg Lys Pro Asp Ser Lys Ile Val Leu Leu Gly Asp Met Asn Val
 1 5 10 15
 Gly Lys Thr Ser Leu Leu Gln Arg Tyr Met Glu Arg Arg Phe Pro Asp
 20 25 30
 Thr Val Ser Thr Val Gly Gly Ala Phe Tyr Leu Lys Gln Trp Arg Ser
 35 40 45
 Tyr Asn Ile Ser Ile Trp Asp Thr Ala Gly Arg Glu Gln Phe His Gly
 50 55 60
 Leu Gly Ser Met Tyr Cys Arg Gly Ala Ala Ala Ile Ile Leu Thr Tyr
 65 70 75 80
 Asp Val Asn His Arg Gln Ser Leu Val Glu Leu Glu Asp Arg Phe Leu
 85 90 95
 Gly Leu Thr Asp Thr Ala Ser Lys Asp Cys Leu Phe Ala Ile Val Gly
 100 105 110
 Asn Lys Val Asp Leu Thr Glu Glu Gly Ala Leu Ala Gly Gln Glu Lys
 115 120 125
 Glu Glu Cys Ser Pro Asn Met Asp Ala Gly Asp Arg Val Ser Pro Arg
 130 135 140
 Ala Pro Lys Gln Val Gln Leu Glu Asp Ala Val Ala Leu Tyr Lys Lys
 145 150 155 160
 Ile Leu Lys Tyr Lys Met Leu Asp Glu Gln Asp Val Pro Ala Ala Glu
 165 170 175
 Gln Met Cys Phe Glu Thr Ser Ala Lys Thr Gly Tyr Asn Val Asp Leu
 180 185 190
 Leu Phe Glu Thr Leu Phe Asp Leu Val Val Pro Met Ile Leu Gln Gln
 195 200 205
 Arg Ala Glu Arg Pro Ser His Thr Val Asp Ile Ser Ser His Lys Pro
 210 215 220
 Pro Lys Arg Thr Arg Ser Gly Cys Cys Ala *
 225 230 234

<210> 1946
 <211> 1669
 <212> PRT
 <213> Homo sapiens

<400> 1946
 Met Pro Leu Gly Ser Lys Leu Thr Gly Val Ile Val Glu Asn Glu Asn
 1 5 10 15
 Ile Thr Lys Glu Gly Gly Leu Val Asp Met Ala Lys Lys Glu Asn Asp
 20 25 30
 Leu Asn Ala Glu Pro Asn Leu Lys Gln Thr Ile Lys Ala Thr Val Glu
 35 40 45
 Asn Gly Lys Lys Asp Gly Ile Ala Val Asp His Val Val Gly Leu Asn
 50 55 60

Thr	Glu	Lys	Tyr	Ala	Glu	Thr	Val	Lys	Leu	Lys	His	Lys	Arg	Ser	Pro
65					70					75					80
Gly	Lys	Val	Lys	Asp	Ile	Ser	Ile	Asp	Val	Glu	Arg	Arg	Asn	Glu	Asn
				85					90					95	
Ser	Glu	Val	Asp	Thr	Ser	Ala	Gly	Ser	Gly	Ser	Ala	Pro	Ser	Val	Leu
			100					105					110		
His	Gln	Arg	Asn	Gly	Gln	Thr	Glu	Asp	Val	Ala	Thr	Gly	Pro	Arg	Arg
		115					120					125			
Ala	Glu	Lys	Thr	Ser	Val	Ala	Thr	Ser	Thr	Glu	Gly	Lys	Asp	Lys	Asp
		130				135					140				
Val	Thr	Leu	Ser	Pro	Val	Lys	Ala	Gly	Pro	Ala	Thr	Thr	Thr	Ser	Ser
145					150					155					160
Glu	Thr	Arg	Gln	Ser	Glu	Val	Ala	Leu	Pro	Cys	Thr	Ser	Ile	Glu	Ala
				165					170					175	
Asp	Glu	Gly	Leu	Ile	Ile	Gly	Thr	His	Ser	Arg	Asn	Asn	Pro	Leu	His
			180					185					190		
Val	Gly	Ala	Glu	Ala	Ser	Glu	Cys	Thr	Val	Phe	Ala	Ala	Ala	Glu	Glu
		195					200					205			
Gly	Gly	Ala	Val	Val	Thr	Glu	Gly	Phe	Ala	Glu	Ser	Glu	Thr	Phe	Leu
		210				215						220			
Thr	Ser	Thr	Lys	Glu	Gly	Glu	Ser	Gly	Glu	Cys	Ala	Val	Ala	Glu	Ser
225					230					235					240
Glu	Asp	Arg	Ala	Ala	Asp	Leu	Leu	Ala	Val	His	Ala	Val	Lys	Ile	Glu
				245					250					255	
Ala	Asn	Val	Asn	Ser	Val	Val	Thr	Glu	Glu	Lys	Asp	Asp	Ala	Val	Thr
			260					265					270		
Ser	Ala	Gly	Ser	Glu	Glu	Lys	Cys	Asp	Gly	Ser	Leu	Ser	Arg	Asp	Ser
		275					280					285			
Glu	Ile	Val	Glu	Gly	Thr	Ile	Thr	Phe	Ile	Ser	Glu	Val	Glu	Ser	Asp
		290				295					300				
Gly	Ala	Val	Thr	Ser	Ala	Gly	Thr	Glu	Ile	Arg	Ala	Gly	Ser	Ile	Ser
305					310					315					320
Ser	Glu	Glu	Val	Asp	Gly	Ser	Gln	Gly	Asn	Met	Met	Arg	Met	Gly	Pro
				325					330					335	
Lys	Lys	Glu	Thr	Glu	Gly	Thr	Val	Thr	Cys	Thr	Gly	Ala	Glu	Gly	Arg
			340					345					350		
Ser	Asp	Asn	Phe	Val	Ile	Cys	Ser	Val	Thr	Gly	Ala	Gly	Pro	Arg	Glu
		355					360					365			
Glu	Arg	Met	Val	Thr	Gly	Ala	Gly	Val	Val	Leu	Gly	Asp	Asn	Asp	Ala
		370			375					380					
Pro	Pro	Gly	Thr	Ser	Ala	Ser	Gln	Glu	Gly	Asp	Gly	Ser	Val	Asn	Asp
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Gly	Thr	Glu	Gly	Glu	Ser	Ala	Val	Thr	Ser	Thr	Gly	Ile	Thr	Glu	Asp
				405					410					415	
Gly	Glu	Gly	Pro	Ala	Ser	Cys	Thr	Gly	Ser	Glu	Asp	Ser	Ser	Glu	Gly
			420					425					430		
Phe	Ala	Ile	Ser	Ser	Glu	Ser	Glu	Glu	Asn	Gly	Glu	Ser	Ala	Met	Asp
		435					440					445			
Ser	Thr	Val	Ala	Lys	Glu	Gly	Thr	Asn	Val	Pro	Leu	Val	Ala	Ala	Gly
		450				455					460				
Pro	Cys	Asp	Asp	Glu	Gly	Ile	Val	Thr	Ser	Thr	Gly	Ala	Lys	Glu	Glu
465					470					475					480
Asp	Glu	Glu	Gly	Glu	Asp	Val	Val	Thr	Ser	Thr	Gly	Arg	Gly	Asn	Glu
				485					490					495	
Ile	Gly	His	Ala	Ser	Thr	Cys	Thr	Gly	Leu	Gly	Glu	Glu	Ser	Glu	Gly
			500					505					510		
Val	Leu	Ile	Cys	Glu	Ser	Ala	Glu	Gly	Asp	Ser	Gln	Ile	Gly	Thr	Val
		515					520					525			
Val	Glu	His	Val	Glu	Ala	Glu	Ala	Gly	Ala	Ala	Ile	Met	Asn	Ala	Asn
		530				535					540				
Glu	Asn	Asn	Val	Asp	Ser	Met	Ser	Gly	Thr	Glu	Lys	Gly	Ser	Lys	Asp
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Thr	Asp	Ile	Cys	Ser	Ser	Ala	Lys	Gly	Ile	Val	Glu	Ser	Ser	Val	Thr
				565					570					575	

Ser	Ala	Val	Ser	Gly	Lys	Asp	Glu	Val	Thr	Pro	Val	Pro	Gly	Gly	Cys
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Glu	Gly	Pro	Met	Thr	Ser	Ala	Ala	Ser	Asp	Gln	Ser	Asp	Ser	Gln	Leu
		595					600					605			
Glu	Lys	Val	Glu	Asp	Thr	Thr	Ile	Ser	Thr	Gly	Leu	Val	Gly	Gly	Ser
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Tyr	Asp	Val	Leu	Val	Ser	Gly	Glu	Val	Pro	Glu	Cys	Glu	Val	Ala	His
625					630				635						640
Thr	Ser	Pro	Ser	Glu	Lys	Glu	Asp	Glu	Asp	Ile	Ile	Thr	Ser	Val	Glu
				645				650						655	
Asn	Glu	Glu	Cys	Asp	Gly	Leu	Met	Ala	Thr	Thr	Ala	Ser	Gly	Asp	Ile
		660						665					670		
Thr	Asn	Gln	Asn	Ser	Leu	Ala	Gly	Gly	Lys	Asn	Gln	Gly	Lys	Val	Leu
	675						680					685			
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	690					695					700				
Ile	Thr	Asp	Val	Glu	Gly	Gly	Leu	Ser	Asp	Ala	Leu	Arg	Thr	Glu	Glu
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Asn	Met	Glu	Gly	Thr	Arg	Val	Thr	Thr	Glu	Glu	Phe	Glu	Ala	Pro	Met
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Pro	Ser	Ala	Val	Ser	Gly	Asp	Asp	Ser	Gln	Leu	Thr	Ala	Ser	Arg	Ser
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Phe	Glu	Leu	Pro	Ile	Ser	Ser	Ala	Thr	Thr	Ile	Lys	Cys	Ala	Glu	Ser
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Leu	Gln	Pro	Val	Ala	Ala	Ala	Val	Glu	Glu	Arg	Ala	Thr	Gly	Pro	Val
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Leu	Ile	Ser	Thr	Ala	Asp	Phe	Glu	Gly	Pro	Met	Pro	Ser	Ala	Pro	Pro
				805				810						815	
Glu	Ala	Glu	Ser	Pro	Leu	Ala	Ser	Thr	Ser	Lys	Glu	Glu	Lys	Asp	Glu
		820						825					830		
Cys	Ala	Leu	Ile	Ser	Thr	Ser	Ile	Ala	Glu	Glu	Cys	Glu	Ala	Ser	Val
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Ser	Gly	Val	Val	Val	Glu	Ser	Glu	Asn	Glu	Arg	Ala	Gly	Thr	Val	Met
	850					855					860				
Glu	Glu	Lys	Asp	Gly	Ser	Gly	Ile	Ile	Ser	Thr	Ser	Ser	Val	Glu	Asp
865					870					875					880
Cys	Glu	Gly	Pro	Val	Ser	Ser	Ala	Val	Pro	Gln	Glu	Glu	Gly	Asp	Pro
			885					890						895	
Ser	Val	Thr	Pro	Ala	Glu	Glu	Met	Gly	Asp	Thr	Ala	Met	Ile	Ser	Thr
		900						905					910		
Ser	Thr	Ser	Glu	Gly	Cys	Glu	Ala	Val	Met	Ile	Gly	Ala	Val	Leu	Gln
		915					920					925			
Asp	Glu	Asp	Arg	Leu	Thr	Ile	Thr	Arg	Val	Glu	Asp	Leu	Ser	Asp	Ala
	930					935					940				
Ala	Ile	Ile	Ser	Thr	Ser	Thr	Ala	Glu	Cys	Met	Pro	Ile	Ser	Ala	Ser
945					950					955					960
Ile	Asp	Arg	His	Glu	Glu	Asn	Gln	Leu	Thr	Ala	Asp	Asn	Pro	Glu	Gly
				965				970						975	
Asn	Gly	Asp	Leu	Ser	Ala	Thr	Glu	Val	Ser	Lys	His	Lys	Val	Pro	Met
		980						985					990		
Pro	Ser	Leu	Ile	Ala	Glu	Asn	Asn	Cys	Arg	Cys	Pro	Gly	Pro	Val	Arg
		995				1000						1005			
Gly	Gly	Lys	Glu	Pro	Gly	Pro	Val	Leu	Ala	Val	Ser	Thr	Glu	Glu	Gly
	1010					1015						1020			
His	Asn	Gly	Pro	Ser	Val	His	Lys	Pro	Ser	Ala	Gly	Gln	Gly	His	Pro
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Ser	Ala	Val	Cys	Ala	Glu	Lys	Glu	Glu	Lys	His	Gly	Lys	Glu	Cys	Pro
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Glu	Ile	Gly	Pro	Phe	Ala	Gly	Arg	Gly	Gln	Lys	Glu	Ser	Thr	Leu	His
		1060					1065						1070		
Leu	Ile	Asn	Ala	Glu	Glu	Lys	Asn	Val	Leu	Leu	Asn	Ser	Leu	Gln	Lys
	1075						1080						1085		

Glu Asp Lys Ser Pro Glu Thr Gly Thr Ala Gly Gly Ser Ser Thr Ala
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Ser Tyr Ser Ala Gly Arg Gly Leu Glu Gly Asn Ala Asn Ser Pro Ala
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His Leu Arg Gly Pro Glu Gln Pro Ser Gly Gln Thr Ala Lys Asp Pro
1125 1130 1135
Ser Val Ser Ile Arg Tyr Leu Ala Ala Val Asn Thr Gly Ala Ile Lys
1140 1145 1150
Ala Asp Asp Met Pro Pro Val Gln Gly Thr Val Ala Glu His Ser Phe
1155 1160 1165
Leu Pro Ala Glu Gln Gln Gly Ser Glu Asp Asn Leu Lys Thr Ser Thr
1170 1175 1180
Thr Lys Cys Ile Thr Gly Gln Glu Ser Lys Ile Ala Pro Ser His Thr
1185 1190 1195 1200
Met Ile Pro Pro Ala Thr Tyr Ser Val Ala Leu Leu Ala Pro Lys Cys
1205 1210 1215
Glu Gln Asp Leu Thr Ile Lys Asn Asp Tyr Ser Gly Lys Trp Thr Asp
1220 1225 1230
Gln Ala Ser Ala Glu Lys Thr Gly Asp Asp Asn Ser Thr Arg Lys Ser
1235 1240 1245
Phe Pro Glu Glu Gly Asp Ile Met Val Thr Val Ser Ser Glu Glu Asn
1250 1255 1260
Val Cys Asp Ile Gly Asn Glu Glu Ser Pro Leu Asn Val Leu Gly Gly
1265 1270 1275 1280
Leu Lys Leu Lys Ala Asn Leu Lys Met Glu Ala Tyr Val Pro Ser Glu
1285 1290 1295
Glu Glu Lys Asn Gly Glu Ile Leu Ala Pro Pro Glu Ser Leu Cys Gly
1300 1305 1310
Gly Lys Pro Ser Gly Ile Ala Glu Leu Gln Arg Glu Pro Leu Leu Val
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Asn Glu Ser Leu Asn Val Glu Asn Ser Gly Phe Arg Thr Asn Glu Glu
1330 1335 1340
Ile His Ser Glu Ser Tyr Asn Lys Gly Glu Ile Ser Ser Gly Arg Lys
1345 1350 1355 1360
Asp Asn Ala Glu Ala Ile Ser Gly His Ser Val Glu Ala Asp Pro Lys
1365 1370 1375
Glu Val Glu Glu Glu Glu Arg His Met Pro Lys Arg Lys Arg Lys Gln
1380 1385 1390
His Tyr Leu Ser Ser Glu Asp Glu Pro Asp Asp Asn Pro Asp Val Leu
1395 1400 1405
Asp Ser Arg Ile Glu Thr Ala Gln Arg Gln Cys Pro Glu Thr Glu Pro
1410 1415 1420
His Asp Thr Lys Glu Glu Asn Ser Arg Asp Leu Glu Glu Leu Pro Lys
1425 1430 1435 1440
Thr Ser Ser Glu Ala Asn Ser Thr Thr Ser Arg Val Met Glu Glu Lys
1445 1450 1455
Asp Glu Tyr Ser Ser Ser Glu Thr Thr Gly Glu Lys Pro Glu Gln Asn
1460 1465 1470
Asp Asp Asp Thr Ile Lys Ser Gln Glu Glu Asp Gln Pro Ile Ile Ile
1475 1480 1485
Lys Arg Lys Arg Gly Arg Pro Arg Lys Tyr Pro Val Glu Thr Thr Leu
1490 1495 1500
Lys Met Lys Asp Asp Ser Lys Thr Asp Thr Gly Ile Val Thr Val Glu
1505 1510 1515 1520
Gln Ser Pro Ser Ser Ser Lys Leu Lys Val Met Gln Thr Asp Glu Ser
1525 1530 1535
Asn Lys Glu Thr Ala Asn Leu Gln Glu Arg Ser Ile Ser Asn Asp Asp
1540 1545 1550
Gly Glu Glu Lys Ile Val Thr Ser Val Arg Arg Arg Gly Arg Lys Pro
1555 1560 1565
Lys Arg Ser Leu Thr Val Ser Asp Asp Ala Glu Ser Ser Glu Pro Glu
1570 1575 1580
Arg Lys Arg Gln Lys Ser Val Ser Asp Pro Val Glu Asp Lys Lys Glu
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Gln Glu Ser Asp Glu Glu Glu Glu Glu Glu Glu Asp Glu Pro Ser
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 Gly Ala Thr Thr Arg Ser Thr Thr Arg Ser Glu Ala Gln Arg Ser Lys
 1620 1625 1630
 Thr Gln Leu Ser Pro Ser Ile Lys Arg Lys Arg Glu Val Ser Pro Pro
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 <212> PRT
 <213> Homo sapiens

<400> 1947
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 35 40 45
 Asn Gly Lys Lys Asp Gly Ile Ala Val Asp His Val Val Gly Leu Asn
 50 55 60
 Thr Glu Lys Tyr Ala Glu Thr Val Lys Leu Lys His Lys Arg Ser Pro
 65 70 75 80
 Gly Lys Val Lys Asp Ile Ser Ile Asp Val Glu Arg Arg Asn Glu Asn
 85 90 95
 Ser Glu Val Asp Thr Ser Ala Gly Ser Gly Ser Ala Pro Ser Val Leu
 100 105 110
 His Gln Arg Asn Gly Gln Thr Glu Asp Val Ala Thr Gly Pro Arg Arg
 115 120 125
 Ala Glu Lys Thr Ser Val Ala Thr Ser Thr Glu Gly Lys Asp Lys Asp
 130 135 140
 Val Thr Leu Ser Pro Val Lys Ala Gly Pro Ala Thr Thr Thr Ser Ser
 145 150 155 160
 Glu Thr Arg Gln Ser Glu Val Ala Leu Pro Cys Thr Ser Ile Glu Ala
 165 170 175
 Asp Glu Gly Leu Ile Ile Gly Thr His Ser Arg Asn Asn Pro Leu His
 180 185 190
 Val Gly Ala Glu Ala Ser Glu Cys Thr Val Phe Ala Ala Ala Glu Glu
 195 200 205
 Gly Gly Ala Val Val Thr Glu Gly Phe Ala Glu Ser Glu Thr Phe Leu
 210 215 220
 Thr Ser Thr Lys Glu Gly Glu Ser Gly Glu Cys Ala Val Ala Glu Ser
 225 230 235 240
 Glu Asp Arg Ala Ala Asp Leu Leu Ala Val His Ala Val Lys Ile Glu
 245 250 255
 Ala Asn Val Asn Ser Val Val Thr Glu Glu Lys Asp Asp Ala Val Thr
 260 265 270
 Ser Ala Gly Ser Glu Glu Lys Cys Asp Gly Ser Leu Ser Arg Asp Ser
 275 280 285
 Glu Ile Val Glu Gly Thr Ile Thr Phe Ile Ser Glu Val Glu Ser Asp
 290 295 300
 Gly Ala Val Thr Ser Ala Gly Thr Glu Ile Arg Ala Gly Ser Ile Ser
 305 310 315 320
 Ser Glu Glu Val Asp Gly Ser Gln Gly Asn Met Met Arg Met Gly Pro
 325 330 335
 Lys Lys Glu Thr Glu Gly Thr Val Thr Cys Thr Gly Ala Glu Gly Arg
 340 345 350

Ser	Asp	Asn	Phe	Val	Ile	Cys	Ser	Val	Thr	Gly	Ala	Gly	Pro	Arg	Glu
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Glu	Arg	Met	Val	Thr	Gly	Ala	Gly	Val	Val	Leu	Gly	Asp	Asn	Asp	Ala
	370					375					380				
Pro	Pro	Gly	Thr	Ser	Ala	Ser	Gln	Glu	Gly	Asp	Gly	Ser	Val	Asn	Asp
385					390					395					400
Gly	Thr	Glu	Gly	Glu	Ser	Ala	Val	Thr	Ser	Thr	Gly	Ile	Thr	Glu	Asp
			405					410						415	
Gly	Glu	Gly	Pro	Ala	Ser	Cys	Thr	Gly	Ser	Glu	Asp	Ser	Ser	Glu	Gly
			420					425					430		
Phe	Ala	Ile	Ser	Ser	Glu	Ser	Glu	Glu	Asn	Gly	Glu	Ser	Ala	Met	Asp
	435						440						445		
Ser	Thr	Val	Ala	Lys	Glu	Gly	Thr	Asn	Val	Pro	Leu	Val	Ala	Ala	Gly
	450					455					460				
Pro	Cys	Asp	Asp	Glu	Gly	Ile	Val	Thr	Ser	Thr	Gly	Ala	Lys	Glu	Glu
465					470					475					480
Asp	Glu	Glu	Gly	Glu	Asp	Val	Val	Thr	Ser	Thr	Gly	Arg	Gly	Asn	Glu
			485					490						495	
Ile	Gly	His	Ala	Ser	Thr	Cys	Thr	Gly	Leu	Gly	Glu	Glu	Ser	Glu	Gly
		500						505						510	
Val	Leu	Ile	Cys	Glu	Ser	Ala	Glu	Gly	Asp	Ser	Gln	Ile	Gly	Thr	Val
	515						520					525			
Val	Glu	His	Val	Glu	Ala	Glu	Ala	Gly	Ala	Ala	Ile	Met	Asn	Ala	Asn
	530					535					540				
Glu	Asn	Asn	Val	Asp	Ser	Met	Ser	Gly	Thr	Glu	Lys	Gly	Ser	Lys	Asp
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Thr	Asp	Ile	Cys	Ser	Ser	Ala	Lys	Gly	Ile	Val	Glu	Ser	Ser	Val	Thr
			565					570						575	
Ser	Ala	Val	Ser	Gly	Lys	Asp	Glu	Val	Thr	Pro	Val	Pro	Gly	Gly	Cys
		580					585						590		
Glu	Gly	Pro	Met	Thr	Ser	Ala	Ala	Ser	Asp	Gln	Ser	Asp	Ser	Gln	Leu
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Glu	Lys	Val	Glu	Asp	Thr	Thr	Ile	Ser	Thr	Gly	Leu	Val	Gly	Gly	Ser
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Tyr	Asp	Val	Leu	Val	Ser	Gly	Glu	Val	Pro	Glu	Cys	Glu	Val	Ala	His
625					630					635					640
Thr	Ser	Pro	Ser	Glu	Lys	Glu	Asp	Glu	Asp	Ile	Ile	Thr	Ser	Val	Glu
			645					650						655	
Asn	Glu	Glu	Cys	Asp	Gly	Leu	Met	Ala	Thr	Thr	Ala	Ser	Gly	Asp	Ile
		660					665						670		
Thr	Asn	Gln	Asn	Ser	Leu	Ala	Gly	Gly	Lys	Asn	Gln	Gly	Lys	Val	Leu
	675						680					685			
Ile	Ile	Ser	Thr	Ser	Thr	Thr	Asn	Asp	Tyr	Thr	Pro	Gln	Val	Ser	Ala
	690					695					700				
Ile	Thr	Asp	Val	Glu	Gly	Gly	Leu	Ser	Asp	Ala	Leu	Arg	Thr	Glu	Glu
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Asn	Met	Glu	Gly	Thr	Arg	Val	Thr	Thr	Glu	Glu	Phe	Glu	Ala	Pro	Met
			725					730						735	
Pro	Ser	Ala	Val	Ser	Gly	Asp	Asp	Ser	Gln	Leu	Thr	Ala	Ser	Arg	Ser
		740					745						750		
Glu	Glu	Lys	Asp	Glu	Cys	Ala	Met	Ile	Ser	Thr	Ser	Ile	Gly	Glu	Glu
	755					760						765			
Phe	Glu	Leu	Pro	Ile	Ser	Ser	Ala	Thr	Thr	Ile	Lys	Cys	Ala	Glu	Ser
	770					775					780				
Leu	Gln	Pro	Val	Ala	Ala	Ala	Val	Glu	Glu	Arg	Ala	Thr	Gly	Pro	Val
785					790					795					800
Leu	Ile	Ser	Thr	Ala	Asp	Phe	Glu	Gly	Pro	Met	Pro	Ser	Ala	Pro	Pro
			805					810						815	
Glu	Ala	Glu	Ser	Pro	Leu	Ala	Ser	Thr	Ser	Lys	Glu	Glu	Lys	Asp	Glu
		820					825						830		
Cys	Ala	Leu	Ile	Ser	Thr	Ser	Ile	Ala	Glu	Glu	Cys	Glu	Ala	Ser	Val
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Ser	Gly	Val	Val	Val	Glu	Ser	Glu	Asn	Glu	Arg	Ala	Gly	Thr	Val	Met
	850					855						860			

Glu Glu Lys Asp Gly Ser Gly Ile Ile Ser Thr Ser Ser Val Glu Asp
865 870 875 880
Cys Glu Gly Pro Val Ser Ser Ala Val Pro Gln Glu Glu Gly Asp Pro
885 890 895
Ser Val Thr Pro Ala Glu Glu Met Gly Asp Thr Ala Met Ile Ser Thr
900 905 910
Ser Thr Ser Glu Gly Cys Glu Ala Val Met Ile Gly Ala Val Leu Gln
915 920 925
Asp Glu Asp Arg Leu Thr Ile Thr Arg Val Glu Asp Leu Ser Asp Ala
930 935 940
Ala Ile Ile Ser Thr Ser Thr Ala Glu Cys Met Pro Ile Ser Ala Ser
945 950 955 960
Ile Asp Arg His Glu Glu Asn Gln Leu Thr Ala Asp Asn Pro Glu Gly
965 970 975
Asn Gly Asp Leu Ser Ala Thr Glu Val Ser Lys His Lys Val Pro Met
980 985 990
Pro Ser Leu Ile Ala Glu Asn Asn Cys Arg Cys Pro Gly Pro Val Arg
995 1000 1005
Gly Gly Lys Glu Pro Gly Pro Val Leu Ala Val Ser Thr Glu Glu Gly
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His Asn Gly Pro Ser Val His Lys Pro Ser Ala Gly Gln Gly His Pro
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Ser Ala Val Cys Ala Glu Lys Glu Glu Lys His Gly Lys Glu Cys Pro
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Glu Ile Gly Pro Phe Ala Gly Arg Gly Gln Lys Glu Ser Thr Leu His
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Leu Ile Asn Ala Glu Glu Lys Asn Val Leu Leu Asn Ser Leu Gln Lys
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Glu Asp Lys Ser Pro Glu Thr Gly Thr Ala Gly Gly Ser Ser Thr Ala
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Ser Tyr Ser Ala Gly Arg Gly Leu Glu Gly Asn Ala Asn Ser Pro Ala
1105 1110 1115 1120
His Leu Arg Gly Pro Glu Gln Pro Ser Gly Gln Thr Ala Lys Asp Pro
1125 1130 1135
Ser Val Ser Ile Arg Tyr Leu Ala Ala Val Asn Thr Gly Ala Ile Lys
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Met Ile Pro Pro Ala Thr Tyr Ser Val Ala Leu Leu Ala Pro Lys Cys
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Glu Gln Asp Leu Thr Ile Lys Asn Asp Tyr Ser Gly Lys Trp Thr Asp
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Phe Pro Glu Glu Gly Asp Ile Met Val Thr Val Ser Ser Glu Glu Asn
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Val Cys Asp Ile Gly Asn Glu Glu Ser Pro Leu Asn Val Leu Gly Gly
1265 1270 1275 1280
Leu Lys Leu Lys Ala Asn Leu Lys Met Glu Ala Tyr Val Pro Ser Glu
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Glu Glu Lys Asn Gly Glu Ile Leu Ala Pro Pro Glu Ser Leu Cys Gly
1300 1305 1310
Gly Lys Pro Ser Gly Ile Ala Glu Leu Gln Arg Glu Pro Leu Leu Val
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Asn Glu Ser Leu Asn Val Glu Asn Ser Gly Phe Arg Thr Asn Glu Glu
1330 1335 1340
Ile His Ser Glu Ser Tyr Asn Lys Gly Glu Ile Ser Ser Gly Arg Lys
1345 1350 1355 1360
Asp Asn Ala Glu Ala Ile Ser Gly His Ser Val Glu Ala Asp Pro Lys
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Glu Val Glu Glu Glu Glu Arg His Met Pro Lys Arg Lys Arg Lys Gln
 1380 1385 1390
 His Tyr Leu Ser Ser Glu Asp Glu Pro Asp Asp Asn Pro Asp Val Leu
 1395 1400 1405
 Asp Ser Arg Ile Glu Thr Ala Gln Arg Gln Cys Pro Glu Thr Glu Pro
 1410 1415 1420
 His Asp Thr Lys Glu Glu Asn Ser Arg Asp Leu Glu Glu Leu Pro Lys
 1425 1430 1435 1440
 Thr Ser Ser Glu Ala Asn Ser Thr Thr Ser Arg Val Met Glu Glu Lys
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 Asp Glu Tyr Ser Ser Ser Glu Thr Thr Gly Glu Lys Pro Glu Gln Asn
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 Asp Asp Asp Thr Ile Lys Ser Gln Glu Glu Asp Gln Pro Ile Ile Ile
 1475 1480 1485
 Lys Arg Lys Arg Gly Arg Pro Arg Lys Tyr Pro Val Glu Thr Thr Leu
 1490 1495 1500
 Lys Met Lys Asp Asp Ser Lys Thr Asp Thr Gly Ile Val Thr Val Glu
 1505 1510 1515 1520
 Gln Ser Pro Ser Ser Ser Lys Leu Lys Val Met Gln Thr Asp Glu Ser
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 Asn Lys Glu Thr Ala Asn Leu Gln Glu Arg Ser Ile Ser Asn Asp Asp
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 Gly Glu Glu Lys Ile Val Thr Ser Val Arg Arg Arg Gly Arg Lys Pro
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 Lys Arg Ser Leu Thr Val Ser Asp Asp Ala Glu Ser Ser Glu Pro Glu
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 Arg Lys Arg Gln Lys Ser Val Ser Asp Pro Val Glu Asp Lys Lys Glu
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 Gln Glu Ser Asp Glu Glu Glu Glu Glu Glu Glu Asp Glu Pro Ser
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 Gly Ala Thr Thr Arg Ser Thr Thr Arg Ser Glu Ala Gln Arg Lys Gln
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 His Ser Lys Pro Ser Ala Arg Ala Thr Ser Lys Leu Gly Ser Pro Asp
 1635 1640 1645
 Thr Val Ser Pro Arg Asn Arg Gln Lys Leu Ala Lys Glu Lys Leu Pro
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 Thr Ser Glu Lys Val Ser Asn Ser Pro Pro Leu Gly Arg Ser Lys Thr
 1665 1670 1675 1680
 Gln Leu Ser Pro Ser Ile Lys Arg Lys Arg Glu Val Ser Pro Pro Gly
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 Ala Lys Arg *
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<400> 1948
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 Ala Thr Pro Arg Lys Gln Arg Arg Glu Arg Thr Thr Phe Thr Arg Ser
 35 40 45
 Gln Leu Asp Val Leu Glu Ala Leu Phe Ala Lys Thr Arg Tyr Pro Asp
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 Ile Phe Met Arg Glu Glu Val Ala Leu Lys Ile Asn Leu Pro Glu Ser
 65 70 75 80

Arg Val Gln Val Trp Phe Lys Asn Arg Arg Ala Lys Cys Arg Gln Gln
 85 90 95
 Gln Gln Ser Gly Ser Gly Thr Lys Ser Arg Pro Ala Lys Lys Lys Ser
 100 105 110
 Ser Pro Val Arg Glu Ser Ser Gly Ser Glu Ser Ser Gly Gln Phe Thr
 115 120 125
 Pro Pro Ala Val Ser Ser Ser Ala Ser Ser Ser Ser Ala Ser Ser
 130 135 140
 Ser Ser Ala Asn Pro Ala Ala Ala Ala Ala Gly Leu Gly Gly Asn
 145 150 155 160
 Pro Val Ala Ala Ala Ser Ser Leu Ser Thr Pro Ala Ala Ser Ser Ile
 165 170 175
 Trp Ser Pro Ala Ser Ile Ser Pro Gly Ser Ala Pro Ala Ser Val Ser
 180 185 190
 Val Pro Glu Pro Leu Ala Ala Pro Ser Asn Thr Ser Cys Met Gln Arg
 195 200 205
 Ser Val Ala Ala Gly Ala Ala Thr Ala Ala Ala Ser Tyr Pro Met Ser
 210 215 220
 Tyr Gly Gln Gly Gly Ser Tyr Gly Gln Gly Tyr Pro Thr Pro Ser Ser
 225 230 235 240
 Ser Tyr Phe Gly Gly Val Asp Cys Ser Ser Tyr Leu Ala Pro Met His
 245 250 255
 Ser His His His Pro His Gln Leu Ser Pro Met Ala Pro Ser Ser Met
 260 265 270
 Ala Gly His His His His His Pro His Ala His His Pro Leu Ser Gln
 275 280 285
 Ser Ser Gly His His His His His His His His His His Gln Gly Tyr
 290 295 300
 Gly Gly Ser Gly Leu Ala Phe Asn Ser Ala Asp Cys Leu Asp Tyr Lys
 305 310 315 320
 Glu Pro Gly Ala Ala Ala Ala Ser Ser Ala Trp Lys Leu Asn Phe Asn
 325 330 335
 Ser Pro Val Cys Leu Asp Tyr Lys Asp Gln Ala Ser Trp Arg Phe Gln
 340 345 350
 Val Leu *
 354

<210> 1949

<211> 787

<212> PRT

<213> Homo sapiens

<400> 1949

Met Pro Arg Glu Pro Arg Gly Tyr Arg Thr Arg Val Pro Ala Leu Arg
 1 5 10 15
 Glu Leu Val Pro Ser Ser His Ala Gly Ser Gly Ala Ser Glu His Cys
 20 25 30
 Gln Asn Asn Arg Gln Gly Ser Arg Gln His Arg Ala Ser Arg Asn Val
 35 40 45
 Gln Ala Gly Gly Ala Leu Ala Pro Pro Arg His Leu Cys Gly Leu Cys
 50 55 60
 Ser Arg Leu His Phe Leu Lys Pro Asp Leu Ser Val Arg Ala Ala Pro
 65 70 75 80
 Ser Arg Ala Gly Ala Ser Val Met Ala Leu Arg Lys Glu Leu Leu Lys
 85 90 95
 Ser Ile Trp Tyr Ala Phe Thr Ala Leu Asp Val Glu Lys Ser Gly Lys
 100 105 110
 Val Ser Lys Ser Gln Pro Arg Val Leu Ser His Asn Leu Tyr Thr Val
 115 120 125
 Leu His Ile Pro His Asp Pro Val Ala Leu Glu Glu His Phe Arg Asp
 130 135 140

Asp	Asp	Asp	Gly	Pro	Val	Ser	Ser	Gln	Gly	Tyr	Met	Pro	Tyr	Leu	Asn
145					150					155					160
Lys	Tyr	Ile	Leu	Asp	Lys	Val	Glu	Glu	Gly	Ala	Phe	Val	Lys	Glu	His
				165					170					175	
Phe	Asp	Glu	Leu	Cys	Trp	Thr	Leu	Thr	Ala	Lys	Lys	Asn	Tyr	Arg	Ala
			180					185					190		
Asp	Ser	Asn	Gly	Asn	Ser	Met	Leu	Ser	Asn	Gln	Asp	Ala	Phe	Arg	Leu
	195						200					205			
Trp	Cys	Leu	Phe	Asn	Phe	Leu	Ser	Glu	Asp	Lys	Tyr	Pro	Leu	Ile	Met
210						215					220				
Val	Pro	Asp	Glu	Gly	Asp	Glu	Gly	Asn	His	Pro	Ser	Pro	Glu	Pro	Val
225					230					235					240
Pro	Ser	Thr	Lys	His	Pro	Asn	Lys	Thr	Gln	Asp	Pro	Pro	Glu	Ser	Pro
				245					250					255	
Lys	Gln	Ser	Val	Pro	Lys	Ser	Cys	Trp	Gly	Arg	Leu	Trp	Glu	Pro	Asp
			260					265					270		
Arg	Ala	Leu	Pro	Gly	Val	Gly	Ala	Gly	Asn	Thr	Thr	Cys	Cys	Ser	Tyr
	275						280					285			
Gln	Ala	Phe	Leu	Leu	Leu	Leu	Gln	Val	Glu	Tyr	Leu	Leu	Lys	Lys	Val
	290					295					300				
Leu	Ser	Ser	Met	Ser	Leu	Glu	Val	Ser	Leu	Gly	Glu	Leu	Glu	Glu	Leu
305					310					315					320
Leu	Ala	Gln	Glu	Ala	Gln	Val	Ala	Gln	Thr	Thr	Gly	Gly	Leu	Ser	Val
				325					330					335	
Trp	Gln	Phe	Leu	Glu	Leu	Phe	Asn	Ser	Gly	Cys	Cys	Leu	Arg	Gly	Val
			340					345					350		
Gly	Arg	Asp	Thr	Leu	Ser	Met	Ala	Ile	His	Glu	Val	Tyr	Gln	Glu	Leu
	355						360					365			
Ile	Gln	Asp	Val	Leu	Lys	Arg	Gly	Tyr	Leu	Trp	Lys	Arg	Gly	His	Leu
	370					375					380				
Arg	Arg	Asn	Trp	Ala	Glu	Arg	Trp	Phe	Gln	Leu	Gln	Pro	Ser	Cys	Leu
385					390					395					400
Cys	Tyr	Phe	Gly	Ser	Glu	Glu	Cys	Lys	Glu	Lys	Arg	Gly	Ile	Ile	Pro
			405						410					415	
Leu	Asp	Ala	His	Cys	Cys	Val	Glu	Val	Leu	Pro	Asp	Arg	Asp	Gly	Lys
			420					425					430		
Arg	Cys	Met	Phe	Cys	Val	Lys	Thr	Ala	Thr	Arg	Thr	Tyr	Glu	Met	Ser
	435							440					445		
Ala	Ser	Asp	Thr	Arg	Gln	Arg	Gln	Glu	Trp	Thr	Ala	Ala	Ile	Gln	Met
	450					455					460				
Ala	Ile	Arg	Leu	Gln	Ala	Glu	Gly	Lys	Thr	Ser	Leu	His	Lys	Asp	Leu
465					470					475					480
Lys	Gln	Lys	Arg	Arg	Glu	Gln	Arg	Glu	Gln	Arg	Glu	Arg	Arg	Arg	Ala
				485					490					495	
Ala	Lys	Glu	Glu	Glu	Leu	Leu	Arg	Leu	Gln	Gln	Leu	Gln	Glu	Glu	Lys
			500					505					510		
Glu	Arg	Lys	Leu	Gln	Glu	Leu	Glu	Leu	Leu	Gln	Glu	Ala	Gln	Arg	Gln
	515						520					525			
Ala	Glu	Arg	Leu	Leu	Gln	Glu	Glu	Glu	Glu	Arg	Arg	Arg	Ser	Gln	His
	530					535						540			
Arg	Glu	Leu	Gln	Gln	Ala	Leu	Glu	Gly	Gln	Leu	Arg	Glu	Ala	Glu	Gln
545					550					555					560
Ala	Arg	Ala	Ser	Met	Gln	Ala	Glu	Met	Glu	Leu	Lys	Glu	Glu	Glu	Ala
				565					570					575	
Ala	Arg	Gln	Arg	Gln	Arg	Ile	Lys	Glu	Leu	Glu	Glu	Met	Gln	Gln	Arg
			580					585					590		
Leu	Gln	Glu	Ala	Leu	Gln	Leu	Glu	Val	Lys	Ala	Arg	Arg	Asp	Glu	Glu
	595						600					605			
Ser	Val	Arg	Ile	Ala	Gln	Thr	Arg	Leu	Leu	Glu	Glu	Glu	Glu	Glu	Lys
	610					615						620			
Leu	Lys	Gln	Leu	Met	Gln	Leu	Lys	Glu	Glu	Gln	Glu	Arg	Tyr	Ile	Glu
625					630					635					640
Arg	Ala	Gln	Gln	Glu	Lys	Glu	Glu	Leu	Gln	Gln	Glu	Met	Ala	Gln	Gln
				645					650					655	

Ser Arg Ser Leu Gln Gln Ala Gln Gln Gln Leu Glu Glu Val Arg Gln
 660 665 670
 Asn Arg Gln Arg Ala Asp Glu Asp Val Glu Ala Ala Gln Arg Lys Leu
 675 680 685
 Arg Gln Ala Ser Thr Asn Val Lys His Trp Asn Val Gln Met Asn Arg
 690 695 700
 Leu Met His Pro Ile Glu Pro Gly Asp Lys Arg Pro Val Thr Ser Ser
 705 710 715 720
 Ser Phe Ser Gly Phe Gln Pro Pro Leu Leu Ala His Arg Asp Ser Ser
 725 730 735
 Leu Lys Arg Leu Thr Arg Trp Gly Ser Gln Gly Asn Arg Thr Pro Ser
 740 745 750
 Pro Asn Ser Asn Glu Gln Gln Lys Ser Leu Asn Gly Gly Asp Glu Ala
 755 760 765
 Pro Ala Pro Ala Ser Thr Pro Gln Glu Asp Lys Leu Asp Pro Ala Pro
 770 775 780
 Glu Asn *
 785 786

<210> 1950
 <211> 116
 <212> PRT
 <213> Homo sapiens

<400> 1950
 Met Leu Leu Cys Thr Gly Leu Val Val Gln Ala Gln Arg Gln Ala Ser
 1 5 10 15
 Arg Gln Ser Gln Arg Glu Leu Gly Gly Gln Val Asp Leu Phe Lys Arg
 20 25 30
 Arg Val Val Arg Arg Leu Ala Ser Leu Lys Thr Arg Arg Cys Arg Leu
 35 40 45
 Ser Arg Ala Ala Gln Gly Leu Pro Asp Pro Gly Ala Glu Thr Cys Ala
 50 55 60
 Val Cys Leu Asp Tyr Phe Cys Asn Lys Gln Trp Leu Arg Val Leu Pro
 65 70 75 80
 Cys Lys His Glu Phe His Arg Asp Cys Val Asp Pro Trp Leu Met Leu
 85 90 95
 Gln Gln Thr Cys Pro Leu Cys Lys Phe Asn Val Leu Gly Asn Arg Tyr
 100 105 110
 Ser Asp Asp *
 115

<210> 1951
 <211> 253
 <212> PRT
 <213> Homo sapiens

<400> 1951
 Met Arg Pro Ser Gly Leu Asp Arg Val Leu Pro Gln Arg Val Gln Pro
 1 5 10 15
 Leu Leu Pro Leu Leu Leu Leu Gly Leu Gln Val Leu Leu Val Leu Val
 20 25 30
 Glu Pro Ala Ala His Gly Thr Cys Leu Leu Arg Pro Gln Val Gln Gly
 35 40 45
 Leu Val Leu Leu Ala Leu Val Glu Phe Pro Glu Val Phe Phe Leu Ser
 50 55 60
 Leu Val Asn Asn Cys Glu Asn Thr Gly Asn Gly Phe Pro Asp Asp Ser
 65 70 75 80


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Asp Leu Arg Glu Leu Gly Gly Arg Thr Ala Cys His Phe Gly Asp Ala
      85                      90                      95
Gln Leu Gly Gln Leu His Leu Gln Val Gln Leu Phe Gln Gln Leu
      100                    105                    110
Leu Leu Leu Leu Pro Ser Glu Arg Ala Ala Ala Leu Ala Ala Cys Ala
      115                    120                    125
Ala Met Ala Lys Ile Lys Ala Arg Asp Leu Arg Gly Lys Lys Lys Glu
      130                    135                    140
Glu Leu Leu Lys Gln Leu Asp Asp Leu Lys Val Glu Leu Ser Gln Leu
145      150                    155                    160
Arg Val Ala Lys Val Thr Gly Gly Ala Ala Ser Lys Leu Ser Lys Ile
      165                    170                    175
Arg Val Val Arg Lys Ser Ile Ala Arg Val Leu Thr Val Ile Asn Gln
      180                    185                    190
Thr Gln Lys Glu Asn Leu Arg Lys Phe Tyr Lys Gly Lys Lys Tyr Lys
      195                    200                    205
Pro Leu Asp Leu Arg Pro Lys Lys Thr Arg Ala Met Arg Arg Arg Leu
      210                    215                    220
Asn Lys His Glu Glu Asn Leu Lys Thr Lys Lys Gln Gln Arg Lys Glu
225      230                    235                    240
Arg Leu Tyr Pro Leu Arg Lys Tyr Ala Val Lys Ala *
      245                    250                    252

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<210> 1952

<211> 259

<212> PRT

<213> Homo sapiens

<400> 1952

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Met Pro Ser Leu Arg Ala Cys Phe Lys Ser Ile Phe Arg Ile His Thr
  1      5                      10                      15
Glu Thr Gly Asn Ile Trp Thr His Leu Leu Gly Cys Val Phe Phe Leu
      20                    25                    30
Cys Leu Gly Ile Phe Tyr Met Phe Arg Pro Asn Ile Ser Phe Val Ala
      35                    40                    45
Pro Leu Gln Glu Lys Val Val Phe Gly Leu Phe Phe Leu Gly Ala Ile
      50                    55                    60
Leu Cys Leu Ser Phe Ser Trp Leu Phe His Thr Val Tyr Cys His Ser
65      70                    75                    80
Glu Gly Val Ser Arg Leu Phe Ser Lys Leu Asp Tyr Ser Gly Ile Ala
      85                    90                    95
Leu Leu Ile Met Gly Ser Phe Val Pro Trp Leu Tyr Tyr Ser Phe Tyr
      100                    105                    110
Cys Asn Pro Gln Pro Cys Phe Ile Tyr Leu Ile Val Ile Cys Val Leu
      115                    120                    125
Gly Ile Ala Ala Ile Ile Val Ser Gln Trp Asp Met Phe Ala Thr Pro
      130                    135                    140
Gln Tyr Arg Gly Val Arg Ala Gly Val Phe Leu Gly Leu Gly Leu Ser
145      150                    155                    160
Gly Ile Ile Pro Thr Leu His Tyr Val Ile Ser Glu Gly Phe Leu Lys
      165                    170                    175
Ala Ala Thr Ile Gly Gln Ile Gly Trp Leu Met Leu Met Ala Ser Leu
      180                    185                    190
Tyr Ile Thr Gly Ala Ala Leu Tyr Ala Ala Arg Ile Pro Glu Arg Phe
      195                    200                    205
Phe Pro Gly Lys Cys Asp Ile Trp Phe His Ser His Gln Leu Phe His
      210                    215                    220
Ile Phe Val Val Ala Gly Ala Phe Val His Phe His Gly Val Ser Asn
225      230                    235                    240
Leu Gln Glu Phe Arg Phe Met Ile Gly Gly Gly Cys Ser Glu Glu Asp
      245                    250                    255

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Ala Leu *
258

<210> 1953
<211> 293
<212> PRT
<213> Homo sapiens

<400> 1953
Met Lys Ala Thr Val Leu Met Arg Gln Pro Gly Arg Val Gln Glu Ile
1 5 10 15
Val Gly Ala Leu Arg Lys Gly Gly Gly Asp Arg Leu Gln Val Ile Ser
20 25 30
Asp Phe Asp Met Thr Leu Ser Arg Phe Ala Tyr Asn Gly Lys Arg Cys
35 40 45
Pro Ser Ser Tyr Asn Ile Leu Asp Asn Ser Lys Ile Ile Ser Glu Glu
50 55 60
Cys Arg Lys Glu Leu Thr Ala Leu Leu His His Tyr Tyr Pro Ile Glu
65 70 75 80
Ile Asp Pro His Arg Thr Val Lys Glu Lys Leu Pro His Met Val Glu
85 90 95
Trp Trp Thr Lys Ala His Asn Leu Leu Cys Gln Gln Lys Ile Gln Lys
100 105 110
Phe Gln Ile Ala Gln Val Val Arg Glu Ser Asn Ala Met Leu Arg Glu
115 120 125
Gly Tyr Lys Thr Phe Phe Asn Thr Leu Tyr His Asn Asn Ile Pro Leu
130 135 140
Phe Ile Phe Ser Ala Gly Ile Gly Asp Ile Leu Glu Glu Ile Ile Arg
145 150 155 160
Gln Met Lys Val Phe His Pro Asn Ile His Ile Val Ser Asn Tyr Met
165 170 175
Asp Phe Asn Glu Asp Gly Phe Leu Gln Gly Phe Lys Gly Gln Leu Ile
180 185 190
His Thr Tyr Asn Lys Asn Ser Ser Ala Cys Glu Asn Ser Gly Tyr Phe
195 200 205
Gln Gln Leu Glu Gly Lys Thr Asn Val Ile Leu Leu Gly Asp Ser Ile
210 215 220
Gly Asp Leu Thr Met Ala Asp Gly Val Pro Gly Val Gln Asn Ile Leu
225 230 235 240
Lys Ile Gly Phe Leu Asn Asp Lys Val Glu Glu Arg Arg Glu Arg Tyr
245 250 255
Met Asp Ser Tyr Asp Ile Val Leu Glu Lys Asp Glu Thr Leu Asp Val
260 265 270
Val Asn Gly Leu Leu Gln His Ile Leu Cys Gln Gly Val Gln Leu Glu
275 280 285
Met Gln Gly Pro *
290 292

<210> 1954
<211> 154
<212> PRT
<213> Homo sapiens

<400> 1954
Met Glu Glu Asp Asn Trp Arg Trp His Phe Tyr Asp Thr Val Lys Gly
1 5 10 15
Ser Asp Trp Leu Gly Asp Gln Asp Ala Ile His Tyr Met Thr Glu Gln
20 25 30

Ala Pro Ala Ala Val Val Glu Leu Glu Asn Tyr Gly Met Pro Phe Ser
 35 40 45
 Arg Thr Glu Asp Gly Lys Ile Tyr Gln Arg Ala Phe Gly Gly Gln Ser
 50 55 60
 Leu Lys Phe Gly Lys Gly Gly Gln Ala His Arg Cys Cys Cys Val Ala
 65 70 75 80
 Asp Arg Thr Gly His Ser Leu Leu His Thr Leu Tyr Gly Arg Ser Leu
 85 90 95
 Arg Tyr Asp Thr Ser Tyr Phe Val Glu Tyr Phe Ala Leu Asp Leu Leu
 100 105 110
 Met Glu Asn Gly Glu Cys Arg Gly Val Ile Ala Leu Cys Ile Glu Val
 115 120 125
 Asp Ala Ala Ala Asn Ser Asp Pro Arg Glu Ile Ser Phe Phe Gly Phe
 130 135 140
 Gly Gly Val Ser Ser Ser Ser Asn Arg *
 145 150 153

<210> 1955
 <211> 1159
 <212> PRT
 <213> Homo sapiens

<400> 1955
 Met Glu Gly Leu Leu Gly Ala Trp Glu Gly Ala Pro Arg Gln Pro Pro
 1 5 10 15
 Arg His Leu Gln Ala Asn Ser Thr Val Thr Ser Phe Gln Arg Tyr His
 20 25 30
 Glu Ala Leu Asn Thr Pro Phe Glu Leu Asn Leu Ser Gly Glu Pro Gly
 35 40 45
 Asn Gln Gly Leu Arg Arg Val Val Ile Asp Gly Ser Ser Val Ala Met
 50 55 60
 Val His Gly Leu Gln His Phe Phe Ser Cys Arg Gly Ile Ala Met Ala
 65 70 75 80
 Val Gln Phe Phe Trp Asn Arg Gly His Arg Glu Val Thr Val Phe Val
 85 90 95
 Pro Thr Trp Gln Leu Lys Lys Asn Arg Arg Val Arg Glu Ser His Phe
 100 105 110
 Leu Thr Lys Leu His Ser Leu Lys Met Leu Ser Ile Thr Pro Ser Gln
 115 120 125
 Leu Glu Asn Gly Lys Lys Ile Thr Thr Tyr Asp Tyr Arg Phe Met Val
 130 135 140
 Lys Leu Ala Glu Glu Thr Asp Gly Ile Ile Val Thr Asn Glu Gln Ile
 145 150 155 160
 His Ile Leu Met Asn Ser Ser Lys Lys Leu Met Val Lys Asp Arg Leu
 165 170 175
 Leu Pro Phe Thr Phe Ala Gly Asn Leu Phe Met Val Pro Asp Asp Pro
 180 185 190
 Leu Gly Arg Asp Gly Pro Thr Leu Asp Glu Phe Leu Lys Lys Pro Asn
 195 200 205
 Arg Leu Asp Thr Asp Ile Gly Asn Phe Leu Lys Val Trp Lys Thr Leu
 210 215 220
 Pro Pro Ser Ser Ala Ser Val Thr Glu Leu Ser Asp Asp Ala Asp Ser
 225 230 235 240
 Gly Pro Leu Glu Ser Leu Pro Asn Met Glu Val Arg Glu Glu Lys
 245 250 255
 Glu Glu Arg Gln Asp Glu Glu Gln Arg Gln Gly Gln Gly Thr Gln Lys
 260 265 270
 Ala Ala Glu Glu Asp Asp Leu Asp Ser Ser Leu Ala Ser Val Phe Arg
 275 280 285
 Val Glu Cys Pro Ser Leu Ser Glu Glu Ile Leu Arg Cys Leu Ser Leu
 290 295 300

His	Asp	Pro	Pro	Asp	Gly	Ala	Leu	Asp	Ile	Asp	Leu	Leu	Pro	Gly	Ala
305					310					315					320
Ala	Ser	Pro	Tyr	Leu	Gly	Ile	Pro	Trp	Asp	Gly	Lys	Ala	Pro	Cys	Gln
				325					330					335	
Gln	Val	Leu	Ala	His	Leu	Ala	Gln	Leu	Thr	Ile	Pro	Ser	Asn	Phe	Thr
			340					345					350		
Ala	Leu	Ser	Phe	Phe	Met	Gly	Phe	Met	Asp	Ser	His	Arg	Asp	Ala	Ile
		355					360					365			
Pro	Asp	Tyr	Glu	Ala	Leu	Val	Gly	Pro	Leu	His	Ser	Leu	Leu	Lys	Gln
	370					375					380				
Lys	Pro	Asp	Trp	Gln	Trp	Asp	Gln	Glu	His	Glu	Glu	Ala	Phe	Leu	Ala
385				390						395					400
Leu	Lys	Arg	Ala	Leu	Val	Ser	Ala	Leu	Cys	Leu	Met	Ala	Pro	Asn	Ser
				405					410					415	
Gln	Leu	Pro	Phe	Arg	Leu	Glu	Val	Thr	Val	Ser	His	Val	Ala	Leu	Thr
			420					425					430		
Ala	Ile	Leu	His	Gln	Glu	His	Ser	Gly	Arg	Lys	His	Pro	Ile	Ala	Tyr
		435					440					445			
Thr	Ser	Lys	Pro	Leu	Leu	Pro	Asp	Glu	Glu	Ser	Gln	Gly	Pro	Gln	Ser
	450					455					460				
Gly	Gly	Asp	Ser	Pro	Tyr	Ala	Val	Ala	Trp	Ala	Leu	Lys	His	Phe	Ser
465					470					475					480
Arg	Cys	Ile	Gly	Asp	Thr	Pro	Val	Val	Leu	Asp	Leu	Ser	Tyr	Ala	Ser
				485					490					495	
Arg	Thr	Thr	Ala	Asp	Pro	Glu	Val	Arg	Glu	Gly	Arg	Arg	Val	Ser	Lys
			500					505					510		
Ala	Trp	Leu	Ile	Arg	Trp	Ser	Leu	Leu	Val	Gln	Asp	Lys	Gly	Lys	Arg
	515						520					525			
Ala	Leu	Glu	Leu	Ala	Leu	Leu	Gln	Gly	Leu	Leu	Gly	Glu	Asn	Arg	Leu
	530					535					540				
Leu	Thr	Pro	Ala	Ala	Ser	Met	Pro	Arg	Phe	Phe	Gln	Val	Leu	Pro	Pro
545					550					555					560
Phe	Ser	Asp	Leu	Ser	Thr	Phe	Val	Cys	Ile	His	Met	Ser	Gly	Tyr	Cys
				565					570					575	
Phe	Tyr	Arg	Glu	Asp	Glu	Trp	Cys	Ala	Gly	Phe	Gly	Leu	Tyr	Val	Leu
			580					585					590		
Ser	Pro	Thr	Ser	Pro	Pro	Val	Ser	Leu	Ser	Phe	Ser	Cys	Ser	Pro	Tyr
	595					600						605			
Thr	Pro	Thr	Tyr	Ala	His	Leu	Ala	Ala	Val	Ala	Cys	Gly	Leu	Glu	Arg
	610					615					620				
Phe	Gly	Gln	Ser	Pro	Leu	Pro	Val	Val	Phe	Leu	Thr	His	Cys	Asn	Trp
625					630					635					640
Ile	Phe	Ser	Leu	Leu	Trp	Glu	Leu	Leu	Pro	Leu	Trp	Arg	Ala	Arg	Gly
				645					650					655	
Phe	Leu	Ser	Ser	Asp	Gly	Ala	Pro	Leu	Pro	His	Pro	Ser	Leu	Leu	Ser
			660					665					670		
Tyr	Ile	Ile	Ser	Leu	Thr	Ser	Gly	Leu	Ser	Ser	Leu	Pro	Phe	Ile	Tyr
	675						680					685			
Arg	Thr	Ser	Tyr	Arg	Gly	Ser	Leu	Phe	Ala	Val	Thr	Val	Asp	Thr	Leu
	690					695						700			
Ala	Lys	Gln	Gly	Ala	Gln	Gly	Gly	Gly	Gln	Trp	Trp	Ser	Leu	Pro	Lys
705					710					715					720
Asp	Val	Pro	Ala	Pro	Thr	Val	Ser	Pro	His	Ala	Met	Gly	Lys	Arg	Pro
				725					730					735	
Asn	Leu	Leu	Ala	Leu	Gln	Leu	Ser	Asp	Ser	Thr	Leu	Ala	Asp	Ile	Ile
			740					745					750		
Ala	Arg	Leu	Gln	Ala	Gly	Gln	Lys	Leu	Ser	Gly	Ser	Ser	Pro	Phe	Ser
	755						760					765			
Ser	Ala	Phe	Asn	Ser	Leu	Ser	Leu	Asp	Lys	Glu	Ser	Gly	Leu	Leu	Met
	770					775						780			
Phe	Lys	Gly	Asp	Lys	Lys	Pro	Arg	Val	Trp	Val	Val	Pro	Thr	Gln	Leu
785					790					795					800
Arg	Arg	Asp	Leu	Ile	Phe	Ser	Val	His	Asp	Ile	Pro	Leu	Gly	Ala	His
				805					810					815	

Gln Arg Pro Glu Glu Thr Tyr Lys Lys Leu Arg Leu Leu Gly Trp Trp
 820 825 830
 Pro Gly Met Gln Glu His Val Lys Asp Tyr Cys Arg Ser Cys Leu Phe
 835 840 845
 Cys Ile Pro Arg Asn Leu Ile Gly Ser Glu Leu Lys Val Ile Glu Ser
 850 855 860
 Pro Trp Pro Leu Arg Ser Thr Ala Pro Trp Ser Asn Leu Gln Ile Glu
 865 870 875 880
 Val Val Gly Pro Val Thr Ile Ser Glu Glu Gly His Lys His Val Leu
 885 890 895
 Ile Val Ala Asp Pro Asn Thr Arg Trp Val Glu Ala Phe Pro Leu Lys
 900 905 910
 Pro Tyr Thr His Thr Ala Val Ala Gln Val Leu Leu Gln His Val Phe
 915 920 925
 Ala Arg Trp Gly Val Pro Val Arg Leu Glu Ala Ala Gln Gly Pro Gln
 930 935 940
 Phe Ala Arg His Val Leu Val Ser Cys Gly Leu Ala Leu Gly Ala Gln
 945 950 955 960
 Val Ala Ser Leu Ser Arg Asp Leu Gln Phe Pro Cys Leu Thr Ser Ser
 965 970 975
 Gly Ala Tyr Trp Glu Phe Lys Arg Ala Leu Lys Glu Phe Ile Phe Leu
 980 985 990
 His Gly Lys Lys Trp Ala Ala Ser Leu Pro Leu Leu His Leu Ala Phe
 995 1000 1005
 Arg Ala Ser Ser Thr Asp Ala Thr Pro Phe Lys Val Leu Thr Gly Gly
 1010 1015 1020
 Glu Ser Arg Leu Thr Glu Pro Leu Trp Trp Glu Met Ser Ser Ala Asn
 1025 1030 1035 1040
 Ile Glu Gly Leu Lys Met Asp Val Phe Leu Leu Gln Leu Val Gly Glu
 1045 1050 1055
 Leu Leu Glu Leu His Trp Arg Val Ala Asp Lys Ala Ser Glu Lys Ala
 1060 1065 1070
 Glu Asn Arg Arg Phe Lys Arg Glu Ser Gln Glu Lys Glu Trp Asn Val
 1075 1080 1085
 Gly Asp Gln Val Leu Leu Leu Ser Leu Pro Arg Asn Gly Ser Ser Ala
 1090 1095 1100
 Lys Trp Val Gly Pro Phe Tyr Ile Gly Asp Arg Leu Ser Leu Ser Leu
 1105 1110 1115 1120
 Tyr Arg Ile Trp Gly Phe Pro Thr Pro Glu Lys Leu Gly Cys Ile Tyr
 1125 1130 1135
 Pro Ser Ser Leu Met Lys Ala Phe Ala Lys Ser Gly Thr Pro Leu Ser
 1140 1145 1150
 Phe Lys Val Leu Glu Gln *
 1155 1158

<210> 1956

<211> 608

<212> PRT

<213> Homo sapiens

<400> 1956

Met Gly Ser Val Thr Val Arg Tyr Phe Cys Tyr Gly Cys Leu Phe Thr
 1 5 10 15
 Ser Ala Thr Trp Thr Val Leu Leu Phe Val Tyr Phe Asn Phe Ser Glu
 20 25 30
 Val Thr Gln Pro Leu Lys Asn Val Pro Val Lys Gly Ser Gly Pro His
 35 40 45
 Gly Pro Ser Pro Lys Lys Phe Tyr Pro Arg Phe Thr Arg Gly Pro Ser
 50 55 60
 Arg Val Leu Glu Pro Gln Phe Lys Ala Asn Lys Ile Asp Asp Val Ile
 65 70 75 80

Asp	Ser	Arg	Val	Glu	Asp	Pro	Glu	Glu	Gly	His	Leu	Lys	Phe	Ser	Ser	85	90	95
Glu	Leu	Gly	Met	Ile	Phe	Asn	Glu	Arg	Asp	Gln	Glu	Leu	Arg	Asp	Leu	100	105	110
Gly	Tyr	Gln	Lys	His	Ala	Phe	Asn	Met	Leu	Ile	Ser	Asp	Arg	Leu	Gly	115	120	125
Tyr	His	Arg	Asp	Val	Pro	Asp	Thr	Arg	Asn	Ala	Ala	Cys	Lys	Glu	Lys	130	135	140
Phe	Tyr	Pro	Pro	Asp	Leu	Pro	Ala	Ala	Ser	Val	Val	Ile	Cys	Phe	Tyr	145	150	155
Asn	Glu	Ala	Phe	Ser	Ala	Leu	Leu	Arg	Thr	Val	His	Ser	Val	Ile	Asp	165	170	175
Arg	Thr	Pro	Ala	His	Leu	Leu	His	Glu	Ile	Ile	Leu	Val	Asp	Asp	Asp	180	185	190
Ser	Asp	Phe	Asp	Asp	Leu	Lys	Gly	Glu	Leu	Asp	Glu	Tyr	Val	Gln	Lys	195	200	205
Tyr	Leu	Pro	Gly	Lys	Ile	Lys	Val	Ile	Arg	Asn	Thr	Lys	Arg	Glu	Gly	210	215	220
Leu	Ile	Arg	Gly	Arg	Met	Ile	Gly	Ala	Ala	His	Ala	Thr	Gly	Glu	Val	225	230	235
Leu	Val	Phe	Leu	Asp	Ser	His	Cys	Glu	Val	Asn	Val	Met	Trp	Leu	Gln	245	250	255
Pro	Leu	Leu	Ala	Ala	Ile	Arg	Glu	Asp	Arg	His	Thr	Val	Val	Cys	Pro	260	265	270
Val	Ile	Asp	Ile	Ile	Ser	Ala	Asp	Thr	Leu	Ala	Tyr	Ser	Ser	Ser	Pro	275	280	285
Val	Val	Arg	Gly	Gly	Phe	Asn	Trp	Gly	Leu	His	Phe	Lys	Trp	Asp	Leu	290	295	300
Val	Pro	Leu	Ser	Glu	Leu	Gly	Arg	Ala	Glu	Gly	Ala	Thr	Ala	Pro	Ile	305	310	315
Lys	Ser	Pro	Thr	Met	Ala	Gly	Gly	Leu	Phe	Ala	Met	Asn	Arg	Gln	Tyr	325	330	335
Phe	His	Glu	Leu	Gly	Gln	Tyr	Asp	Ser	Gly	Met	Asp	Ile	Trp	Gly	Gly	340	345	350
Glu	Asn	Leu	Glu	Ile	Ser	Phe	Arg	Ile	Trp	Met	Cys	Gly	Gly	Lys	Leu	355	360	365
Phe	Ile	Ile	Pro	Cys	Ser	Arg	Val	Gly	His	Ile	Phe	Arg	Lys	Arg	Arg	370	375	380
Pro	Tyr	Gly	Ser	Pro	Glu	Gly	Gln	Asp	Thr	Met	Thr	His	Asn	Ser	Leu	385	390	395
Arg	Leu	Ala	His	Val	Trp	Leu	Asp	Glu	Tyr	Lys	Glu	Gln	Tyr	Phe	Ser	405	410	415
Leu	Arg	Pro	Asp	Leu	Lys	Thr	Lys	Ser	Tyr	Gly	Asn	Ile	Ser	Glu	Arg	420	425	430
Val	Glu	Leu	Arg	Lys	Lys	Leu	Gly	Cys	Lys	Ser	Phe	Lys	Trp	Tyr	Leu	435	440	445
Asp	Asn	Val	Tyr	Pro	Glu	Met	Gln	Ile	Ser	Gly	Ser	His	Ala	Lys	Pro	450	455	460
Gln	Gln	Pro	Ile	Phe	Val	Asn	Arg	Gly	Pro	Lys	Arg	Pro	Lys	Val	Leu	465	470	475
Gln	Arg	Gly	Arg	Leu	Tyr	His	Leu	Gln	Thr	Asn	Lys	Cys	Leu	Val	Ala	485	490	495
Gln	Gly	Arg	Pro	Ser	Gln	Lys	Gly	Gly	Leu	Val	Val	Leu	Lys	Ala	Cys	500	505	510
Asp	Tyr	Ser	Asp	Pro	Asn	Gln	Ile	Trp	Ile	Tyr	Asn	Glu	Glu	His	Glu	515	520	525
Leu	Val	Leu	Asn	Ser	Leu	Leu	Cys	Leu	Asp	Met	Ser	Glu	Thr	Arg	Ser	530	535	540
Ser	Asp	Pro	Pro	Arg	Leu	Met	Lys	Cys	His	Gly	Ser	Gly	Gly	Ser	Gln	545	550	555
Gln	Trp	Thr	Phe	Gly	Lys	Asn	Asn	Arg	Leu	Tyr	Gln	Val	Ser	Val	Gly	565	570	575
Gln	Cys	Leu	Arg	Ala	Val	Asp	Pro	Leu	Gly	Gln	Lys	Gly	Ser	Val	Ala	580	585	590

Met Ala Ile Cys Asp Gly Ser Ser Ser Gln Gln Trp His Leu Glu Gly
 595 600 605 608

<210> 1957
 <211> 967
 <212> PRT
 <213> Homo sapiens

<400> 1957
 Met Phe Leu Asn Phe Gly Gln Cys Gly Pro Pro Ala Ser Leu Cys Gln
 1 5 10 15
 Ser Ile Ser Arg Pro Val Pro Val Arg Phe His Asn Tyr Gly Asp Tyr
 20 25 30
 Phe Asn Val Phe Phe Pro Leu Met Val Leu Asn Thr Phe Glu Thr Val
 35 40 45
 Ala Gln Glu Trp Leu Asn Ser Pro Asn Arg Glu Asn Phe Tyr Gln Leu
 50 55 60
 Gln Val Arg Lys Phe Pro Ala Asp Tyr Ile Lys Tyr Trp Glu Phe Ala
 65 70 75 80
 Val Tyr Leu Glu Glu Cys Glu Leu Ala Lys Gln Leu Tyr Pro Lys Glu
 85 90 95
 Asn Asp Leu Val Phe Leu Ala Pro Glu Arg Ile Asn Glu Glu Lys Lys
 100 105 110
 Asp Thr Glu Arg Asn Asp Ile Gln Asp Leu His Glu Tyr His Ser Gly
 115 120 125
 Tyr Val His Lys Phe Arg Arg Thr Ser Val Met Arg Asn Gly Lys Thr
 130 135 140
 Glu Cys Tyr Leu Ser Ile Gln Thr Gln Glu Asn Phe Pro Ala Asn Leu
 145 150 155 160
 Asn Glu Leu Val Asn Cys Ile Val Ile Ser Ser Leu Val Thr Thr Gln
 165 170 175
 Arg Lys Leu Lys Ala Met Ser Leu Leu Gly Ser Arg Asn Gln Leu Ala
 180 185 190
 Arg Ala Val Leu Asn Pro Asn Pro Met Asp Phe Cys Thr Lys Asp Leu
 195 200 205
 Leu Thr Thr Thr Ser Glu Arg Ile Ile Ala Tyr Leu Arg Asp Phe Asn
 210 215 220
 Glu Asp Gln Lys Lys Ala Ile Glu Thr Ala Tyr Ala Met Val Lys His
 225 230 235 240
 Ser Pro Ser Val Ala Lys Ile Cys Leu Ile His Gly Pro Pro Gly Thr
 245 250 255
 Gly Lys Ser Lys Thr Ile Val Gly Leu Leu Tyr Arg Leu Leu Thr Glu
 260 265 270
 Asn Gln Arg Lys Gly His Ser Asp Glu Asn Ser Asn Ala Lys Ile Lys
 275 280 285
 Gln Asn Arg Val Leu Val Cys Ala Pro Ser Asn Ala Ala Val Asp Glu
 290 295 300
 Leu Met Lys Lys Ile Ile Leu Glu Phe Lys Glu Lys Cys Lys Asp Lys
 305 310 315 320
 Lys Asn Pro Leu Gly Asn Cys Gly Asp Ile Asn Leu Val Arg Leu Gly
 325 330 335
 Pro Glu Lys Ser Ile Asn Ser Glu Val Leu Lys Phe Ser Leu Asp Ser
 340 345 350
 Gln Val Asn His Arg Met Lys Lys Glu Leu Pro Ser His Val Gln Ala
 355 360 365
 Met His Lys Arg Lys Glu Phe Leu Asp Tyr Gln Leu Asp Glu Leu Ser
 370 375 380
 Arg Gln Arg Ala Leu Cys Arg Gly Gly Arg Glu Ile Gln Arg Gln Glu
 385 390 395 400

Leu	Asp	Glu	Asn	Ile	Ser	Lys	Val	Ser	Lys	Glu	Arg	Gln	Glu	Leu	Ala	
				405					410					415		
Ser	Lys	Ile	Lys	Glu	Val	Gln	Gly	Arg	Pro	Gln	Lys	Thr	Gln	Ser	Ile	
			420					425					430			
Ile	Ile	Leu	Glu	Ser	His	Ile	Ile	Cys	Cys	Thr	Leu	Ser	Thr	Ser	Gly	
		435					440					445				
Gly	Leu	Leu	Leu	Glu	Ser	Ala	Phe	Arg	Gly	Gln	Gly	Gly	Val	Pro	Phe	
	450					455				460						
Ser	Cys	Val	Ile	Val	Asp	Glu	Ala	Gly	Gln	Ser	Cys	Glu	Ile	Glu	Thr	
465					470					475					480	
Leu	Thr	Pro	Leu	Ile	His	Arg	Cys	Asn	Lys	Leu	Ile	Leu	Val	Gly	Asp	
				485					490					495		
Pro	Lys	Gln	Leu	Pro	Pro	Thr	Val	Ile	Ser	Met	Lys	Ala	Gln	Glu	Tyr	
			500					505					510			
Gly	Tyr	Asp	Gln	Ser	Met	Met	Ala	Arg	Phe	Cys	Arg	Leu	Leu	Glu	Glu	
	515						520					525				
Asn	Val	Glu	His	Asn	Met	Ile	Ser	Arg	Leu	Pro	Ile	Leu	Gln	Leu	Thr	
	530					535					540					
Val	Gln	Tyr	Arg	Met	His	Pro	Asp	Ile	Cys	Leu	Phe	Pro	Ser	Asn	Tyr	
545					550					555					560	
Val	Tyr	Asn	Arg	Asn	Leu	Lys	Thr	Asn	Arg	Gln	Thr	Glu	Ala	Ile	Arg	
				565					570					575		
Cys	Ser	Ser	Asp	Trp	Pro	Phe	Gln	Pro	Tyr	Leu	Val	Phe	Asp	Val	Gly	
			580					585					590			
Asp	Gly	Ser	Glu	Arg	Arg	Asp	Asn	Asp	Ser	Tyr	Ile	Asn	Val	Gln	Glu	
	595						600					605				
Ile	Lys	Leu	Val	Met	Glu	Ile	Ile	Lys	Leu	Ile	Lys	Asp	Lys	Arg	Lys	
	610					615					620					
Asp	Val	Ser	Phe	Arg	Asn	Ile	Gly	Ile	Ile	Thr	His	Tyr	Lys	Ala	Gln	
625					630					635					640	
Lys	Thr	Met	Ile	Gln	Lys	Asp	Leu	Asp	Lys	Glu	Phe	Asp	Arg	Lys	Gly	
				645				650					655			
Pro	Ala	Glu	Val	Asp	Thr	Val	Asp	Ala	Phe	Gln	Gly	Arg	Gln	Lys	Asp	
			660					665					670			
Cys	Val	Ile	Val	Thr	Cys	Val	Arg	Ala	Asn	Ser	Ile	Gln	Gly	Ser	Ile	
	675						680					685				
Gly	Phe	Leu	Ala	Ser	Leu	Gln	Arg	Leu	Asn	Val	Thr	Ile	Thr	Arg	Ala	
	690					695					700					
Lys	Tyr	Ser	Leu	Phe	Ile	Leu	Gly	His	Leu	Arg	Thr	Leu	Met	Glu	Asn	
705					710					715					720	
Gln	His	Trp	Asn	Gln	Leu	Ile	Gln	Asp	Ala	Gln	Lys	Arg	Gly	Ala	Ile	
				725					730					735		
Ile	Lys	Thr	Cys	Asp	Lys	Asn	Tyr	Arg	His	Asp	Ala	Val	Lys	Ile	Leu	
			740					745					750			
Lys	Leu	Lys	Pro	Val	Leu	Gln	Arg	Ser	Leu	Thr	His	Pro	Pro	Thr	Ile	
	755						760					765				
Ala	Pro	Glu	Gly	Ser	Arg	Pro	Gln	Gly	Gly	Leu	Pro	Ser	Ser	Lys	Leu	
	770					775					780					
Asp	Ser	Gly	Phe	Ala	Lys	Thr	Ser	Val	Ala	Ala	Ser	Leu	Tyr	His	Thr	
785					790					795					800	
Pro	Ser	Asp	Ser	Lys	Glu	Ile	Thr	Leu	Thr	Val	Thr	Ser	Lys	Asp	Pro	
				805					810					815		
Glu	Arg	Pro	Pro	Val	His	Asp	Gln	Leu	Gln	Asp	Pro	Arg	Leu	Leu	Lys	
			820					825					830			
Arg	Met	Gly	Ile	Glu	Val	Lys	Gly	Gly	Ile	Phe	Leu	Trp	Asp	Pro	Gln	
	835						840					845				
Pro	Ser	Pro	Pro	Gln	His	Pro	Gly	Ala	Thr	Pro	Pro	Thr	Gly	Glu	Pro	
	850					855					860					
Gly	Phe	Pro	Val	Val	His	Gln	Asp	Leu	Ser	His	Ile	Gln	Gln	Pro	Ala	
865					870					875					880	
Ala	Val	Val	Ala	Ala	Leu	Ser	Ser	His	Lys	Pro	Pro	Val	Arg	Gly	Glu	
				885					890					895		
Pro	Pro	Ala	Ala	Ser	Pro	Glu	Ala	Ser	Thr	Cys	Gln	Ser	Lys	Cys	Asp	
			900					905					910			

Asp Pro Glu Glu Glu Leu Cys His Arg Arg Glu Ala Arg Ala Phe Ser
 915 920 925
 Glu Gly Glu Gln Glu Lys Cys Gly Ser Glu Thr His His Thr Arg Arg
 930 935 940
 Asn Ser Arg Trp Asp Lys Arg Thr Leu Glu Gln Glu Asp Ser Ser Ser
 945 950 955 960
 Lys Lys Arg Lys Leu Leu *
 965 966

<210> 1958
 <211> 256
 <212> PRT
 <213> Homo sapiens

<400> 1958
 Met Pro Arg Glu Asp Arg Ala Thr Trp Lys Ser Asn Tyr Phe Leu Lys
 1 5 10 15
 Ile Ile Gln Leu Leu Asp Asp Tyr Pro Lys Cys Phe Ile Val Gly Ala
 20 25 30
 Asp Asn Val Gly Ser Lys Gln Met Gln Gln Ile Arg Met Ser Leu Arg
 35 40 45
 Gly Lys Ala Val Val Leu Met Gly Lys Asn Thr Met Met Arg Lys Ala
 50 55 60
 Ile Arg Gly His Leu Glu Asn Asn Pro Ala Leu Glu Lys Leu Leu Pro
 65 70 75 80
 His Ile Arg Gly Asn Val Gly Phe Val Phe Thr Lys Glu Asp Leu Thr
 85 90 95
 Glu Ile Arg Asp Met Leu Leu Ala Asn Lys Val Pro Ala Ala Ala Arg
 100 105 110
 Ala Gly Ala Ile Ala Pro Cys Glu Val Thr Val Pro Ala Gln Asn Thr
 115 120 125
 Gly Leu Gly Pro Glu Lys Thr Ser Phe Phe Gln Ala Leu Gly Ile Thr
 130 135 140
 Thr Lys Ile Ser Arg Gly Thr Ile Glu Ile Leu Gly Val Arg Asn Val
 145 150 155 160
 Ala Ser Val Cys Leu Gln Ile Gly Tyr Pro Thr Val Ala Ser Val Pro
 165 170 175
 His Ser Ile Ile Asn Gly Tyr Lys Arg Val Leu Ala Leu Ser Val Glu
 180 185 190
 Thr Asp Tyr Thr Phe Pro Leu Ala Glu Lys Val Lys Ala Phe Leu Ala
 195 200 205
 Asp Pro Ser Ala Phe Val Ala Ala Ala Pro Val Ala Ala Ala Thr Thr
 210 215 220
 Ala Ala Pro Ala Ala Ala Ala Ala Pro Ala Lys Val Glu Ala Lys Glu
 225 230 235 240
 Glu Ser Glu Glu Ser Asp Glu Asp Met Gly Phe Gly Leu Phe Asp *
 245 250 255

<210> 1959
 <211> 231
 <212> PRT
 <213> Homo sapiens

<400> 1959
 Met Asn Glu Pro Leu Asp Tyr Leu Ala Asn Ala Ser Asp Phe Pro Asp
 1 5 10 15
 Tyr Ala Ala Ala Phe Gly Asn Cys Thr Asp Glu Asn Ile Pro Leu Lys
 20 25 30


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Met His Tyr Leu Pro Val Ile Tyr Gly Ile Ile Phe Leu Val Gly Phe
   35           40           45
Pro Gly Asn Ala Val Val Ile Ser Thr Tyr Ile Phe Lys Met Arg Pro
   50           55           60
Trp Lys Ser Ser Thr Ile Ile Met Leu Asn Leu Ala Cys Thr Asp Leu
   65           70           75           80
Leu Tyr Leu Thr Ser Leu Pro Phe Leu Ile His Tyr Tyr Ala Ser Gly
           85           90           95
Glu Asn Trp Ile Phe Gly Asp Phe Met Cys Lys Phe Ile Arg Phe Ser
   100           105           110
Phe His Phe Asn Leu Tyr Ser Ser Ile Leu Phe Leu Thr Cys Phe Ser
   115           120           125
Ile Phe Arg Tyr Cys Val Ile Ile His Pro Met Ser Cys Phe Ser Ile
   130           135           140
His Lys Thr Arg Cys Ala Val Val Ala Cys Ala Val Val Trp Ile Ile
   145           150           155           160
Ser Leu Val Ala Val Ile Pro Met Thr Phe Leu Ile Thr Ser Thr Asn
           165           170           175
Arg Thr Asn Arg Ser Ala Cys Leu Asp Leu Thr Ser Ser Asp Glu Leu
           180           185           190
Asn Thr Ile Lys Trp Tyr Asn Leu Ile Leu Thr Ala Thr Thr Leu Pro
   195           200           205
Pro Leu Gly Asp Ser Asp Thr Leu Leu Tyr His Asp Tyr Pro His Ser
   210           215           220
Asp Pro Trp Thr Ala Asn *
225           230

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<210> 1960

<211> 475

<212> PRT

<213> Homo sapiens

<400> 1960

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Met Arg Leu Ser Lys Thr Leu Val Asp Met Asp Met Ala Asp Tyr Ser
   1           5           10           15
Ala Ala Leu Asp Pro Ala Tyr Thr Thr Leu Glu Phe Glu Asn Val Gln
           20           25           30
Val Leu Thr Met Gly Asn Asp Thr Ser Pro Ser Glu Gly Thr Asn Leu
   35           40           45
Asn Ala Pro Asn Ser Leu Gly Val Ser Ala Leu Cys Ala Ile Cys Gly
   50           55           60
Asp Arg Ala Thr Gly Lys His Tyr Gly Ala Ser Ser Cys Asp Gly Cys
   65           70           75           80
Lys Gly Phe Phe Arg Arg Ser Val Arg Lys Asn His Met Tyr Ser Cys
           85           90           95
Arg Phe Ser Arg Gln Cys Val Val Asp Lys Asp Lys Arg Asn Gln Cys
           100           105           110
Arg Tyr Cys Arg Leu Lys Lys Cys Phe Arg Ala Gly Met Lys Lys Glu
   115           120           125
Ala Val Gln Asn Glu Arg Asp Arg Ile Ser Thr Arg Arg Ser Ser Tyr
   130           135           140
Glu Asp Ser Ser Leu Pro Ser Ile Asn Ala Leu Leu Gln Ala Glu Val
   145           150           155           160
Leu Ser Arg Gln Ile Thr Ser Pro Val Ser Gly Ile Asn Gly Asp Ile
           165           170           175
Arg Ala Lys Lys Ile Ala Ser Ile Ala Asp Val Cys Glu Ser Met Lys
           180           185           190
Glu Gln Leu Leu Val Leu Val Glu Trp Ala Lys Tyr Ile Pro Ala Phe
   195           200           205
Cys Glu Leu Pro Leu Asp Asp Gln Val Ala Leu Leu Arg Ala His Ala
   210           215           220

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Gly Glu His Leu Leu Leu Gly Ala Thr Lys Arg Ser Met Val Phe Lys
 225 230 235 240
 Asp Val Leu Leu Leu Gly Asn Asp Tyr Ile Val Pro Arg His Cys Pro
 245 250 255
 Glu Leu Ala Glu Met Ser Arg Val Ser Ile Arg Ile Leu Asp Glu Leu
 260 265 270
 Val Leu Pro Phe Gln Glu Leu His Ile Asp Asp Asn Glu Tyr Ala Tyr
 275 280 285
 Leu Lys Ala Ile Ile Phe Phe Asp Pro Asp Ala Lys Gly Leu Ser Asp
 290 295 300
 Pro Gly Lys Ile Lys Arg Leu Arg Ser Gln Val Gln Val Ser Leu Glu
 305 310 315 320
 Asp Tyr Ile Asn Asp Arg Gln Tyr Asp Ser Arg Gly Arg Phe Gly Glu
 325 330 335
 Leu Leu Leu Leu Leu Pro Thr Leu Gln Ser Ile Thr Trp Gln Met Ile
 340 345 350
 Glu Gln Ile Gln Phe Ile Lys Leu Phe Gly Met Ala Lys Ile Asp Asn
 355 360 365
 Leu Leu Gln Glu Met Leu Leu Gly Gly Ser Pro Ser Asp Ala Pro His
 370 375 380
 Ala His His Pro Leu His Pro His Leu Met Gln Glu His Met Gly Thr
 385 390 395 400
 Asn Val Ile Val Ala Asn Thr Met Pro Thr His Leu Ser Asn Gly Gln
 405 410 415
 Met Cys Glu Trp Pro Arg Pro Arg Gly Gln Ala Ala Thr Pro Glu Thr
 420 425 430
 Pro Gln Pro Ser Pro Pro Gly Gly Ser Gly Ser Glu Pro Tyr Lys Leu
 435 440 445
 Leu Pro Gly Ala Val Ala Thr Ile Val Lys Pro Leu Ser Ala Ile Pro
 450 455 460
 Gln Pro Thr Ile Thr Lys Gln Glu Val Ile *
 465 470 474

<210> 1961

<211> 870

<212> PRT

<213> Homo sapiens

<400> 1961

Met Glu Pro Glu Thr Ala Leu Trp Gly Pro Asp Leu Gln Gly Pro Glu
 1 5 10 15
 Gln Ser Pro Asn Asp Ala His Arg Gly Ala Glu Ser Glu Asn Glu Glu
 20 25 30
 Glu Ser Pro Arg Gln Glu Ser Ser Gly Glu Glu Ile Ile Met Gly Asp
 35 40 45
 Pro Ala Gln Ser Pro Glu Ser Lys Asp Ser Thr Glu Met Ser Leu Glu
 50 55 60
 Arg Ser Ser Gln Asp Pro Ser Val Pro Gln Asn Pro Pro Thr Pro Leu
 65 70 75 80
 Gly His Ser Asn Pro Leu Asp His Gln Ile Pro Leu Asp Pro Pro Ala
 85 90 95
 Pro Glu Val Val Pro Thr Pro Ser Asp Trp Thr Lys Ala Cys Glu Ala
 100 105 110
 Ser Trp Gln Trp Gly Ala Leu Thr Thr Trp Asn Ser Pro Pro Val Val
 115 120 125
 Pro Ala Asn Glu Pro Ser Leu Arg Glu Leu Val Gln Gly Arg Pro Ala
 130 135 140
 Gly Ala Glu Lys Pro Tyr Ile Cys Asn Glu Cys Gly Lys Ser Phe Ser
 145 150 155 160
 Gln Trp Ser Lys Leu Leu Arg His Gln Arg Ile His Thr Gly Glu Arg
 165 170 175

Pro	Asn	Thr	Cys	Ser	Glu	Cys	Gly	Lys	Ser	Phe	Thr	Gln	Ser	Ser	His
			180					185					190		
Leu	Val	Gln	His	Gln	Arg	Thr	His	Thr	Gly	Glu	Lys	Pro	Tyr	Lys	Cys
		195						200				205			
Pro	Asp	Cys	Gly	Lys	Cys	Phe	Ser	Trp	Ser	Ser	Asn	Leu	Val	Gln	His
	210					215					220				
Gln	Arg	Thr	His	Thr	Gly	Glu	Glu	Pro	Tyr	Lys	Cys	Thr	Glu	Cys	Glu
225					230					235					240
Ile	Ala	Phe	Thr	Gln	Ser	Thr	Asn	Leu	Ile	Lys	His	Gln	Arg	Ser	His
				245					250					255	
Thr	Gly	Glu	Lys	Pro	Tyr	Lys	Cys	Gly	Glu	Cys	Arg	Arg	Ala	Phe	Tyr
			260					265					270		
Arg	Ser	Ser	Asp	Leu	Ile	Gln	His	Gln	Ala	Thr	His	Thr	Gly	Glu	Lys
	275					280						285			
Pro	Tyr	Lys	Cys	Pro	Glu	Cys	Gly	Lys	Arg	Phe	Gly	Gln	Asn	His	Asn
	290				295						300				
Leu	Leu	Lys	His	Gln	Lys	Ile	His	Ala	Gly	Glu	Lys	Pro	Tyr	Arg	Cys
305					310					315					320
Thr	Glu	Cys	Gly	Lys	Ser	Phe	Ile	Gln	Ser	Ser	Glu	Leu	Thr	Gln	His
				325					330					335	
Gln	Arg	Thr	His	Thr	Gly	Glu	Lys	Pro	Tyr	Glu	Cys	Leu	Glu	Cys	Gly
			340					345					350		
Lys	Ser	Phe	Gly	His	Ser	Ser	Thr	Leu	Ile	Lys	His	Gln	Arg	Thr	His
		355					360					365			
Leu	Arg	Glu	Asp	Pro	Phe	Lys	Cys	Pro	Val	Cys	Gly	Lys	Thr	Phe	Thr
	370					375				380					
Leu	Ser	Ala	Thr	Leu	Leu	Arg	His	Gln	Arg	Thr	His	Thr	Gly	Glu	Arg
385					390					395					400
Pro	Tyr	Lys	Cys	Pro	Glu	Cys	Gly	Lys	Ser	Phe	Ser	Val	Ser	Ser	Asn
				405					410					415	
Leu	Ile	Asn	His	Gln	Arg	Ile	His	Arg	Gly	Glu	Arg	Pro	Tyr	Ile	Cys
		420						425					430		
Ala	Asp	Cys	Gly	Lys	Ser	Phe	Ile	Met	Ser	Ser	Thr	Leu	Ile	Arg	His
	435					440					445				
Gln	Arg	Ile	His	Thr	Gly	Glu	Lys	Pro	Tyr	Lys	Cys	Ser	Asp	Cys	Gly
	450					455					460				
Lys	Ser	Phe	Ile	Arg	Ser	Ser	His	Leu	Ile	Gln	His	Arg	Arg	Thr	His
465					470					475					480
Thr	Gly	Glu	Lys	Pro	Tyr	Lys	Cys	Pro	Glu	Cys	Gly	Lys	Ser	Phe	Ser
				485					490					495	
Gln	Ser	Ser	Asn	Leu	Ile	Thr	His	Val	Arg	Thr	His	Met	Asp	Glu	Asn
			500					505					510		
Leu	Phe	Val	Cys	Ser	Asp	Cys	Gly	Lys	Ala	Phe	Leu	Glu	Ala	His	Glu
	515						520					525			
Leu	Glu	Gln	His	Arg	Val	Ile	His	Glu	Arg	Gly	Lys	Thr	Pro	Ala	Arg
	530					535					540				
Arg	Ala	Gln	Gly	Asp	Ser	Leu	Leu	Gly	Leu	Gly	Asp	Pro	Ser	Leu	Leu
545					550					555					560
Thr	Pro	Pro	Pro	Gly	Ala	Lys	Pro	His	Lys	Cys	Leu	Val	Cys	Gly	Lys
				565					570					575	
Gly	Phe	Asn	Asp	Glu	Gly	Ile	Phe	Met	Gln	His	Gln	Arg	Ile	His	Ile
		580						585					590		
Gly	Glu	Asn	Pro	Tyr	Lys	Asn	Ala	Asp	Gly	Leu	Ile	Ala	His	Ala	Ala
	595					600						605			
Pro	Lys	Pro	Pro	Gln	Leu	Arg	Ser	Pro	Arg	Leu	Pro	Phe	Arg	Gly	Asn
	610					615					620				
Ser	Tyr	Pro	Gly	Ala	Ala	Glu	Gly	Arg	Ala	Glu	Ala	Pro	Gly	Gln	Pro
625					630					635					640
Leu	Lys	Pro	Pro	Glu	Gly	Gln	Glu	Gly	Phe	Ser	Gln	Arg	Arg	Gly	Leu
				645					650					655	
Leu	Ser	Ser	Lys	Thr	Tyr	Ile	Cys	Ser	His	Cys	Gly	Glu	Ser	Phe	Leu
			660					665				670			
Asp	Arg	Ser	Val	Leu	Leu	Gln	His	Gln	Leu	Thr	His	Gly	Asn	Glu	Lys
	675						680					685			

Pro Phe Leu Phe Pro Asp Tyr Arg Ile Gly Leu Gly Glu Gly Ala Gly
 690 695 700
 Pro Ser Pro Phe Leu Ser Gly Lys Pro Phe Lys Cys Pro Glu Cys Lys
 705 710 715 720
 Gln Ser Phe Gly Leu Ser Ser Glu Leu Leu Leu His Gln Lys Val His
 725 730 735
 Ala Gly Gly Lys Ser Ser Gln Lys Ser Pro Glu Leu Gly Lys Ser Ser
 740 745 750
 Ser Val Leu Leu Glu His Leu Arg Ser Pro Leu Gly Ala Arg Pro Tyr
 755 760 765
 Arg Cys Ser Asp Cys Arg Ala Ser Phe Leu Asp Arg Val Ala Leu Thr
 770 775 780
 Arg His Gln Glu Thr His Thr Gln Glu Lys Pro Pro Asn Pro Glu Asp
 785 790 795 800
 Pro Pro Pro Glu Ala Val Thr Leu Ser Thr Asp Gln Glu Gly Glu Gly
 805 810 815
 Glu Thr Pro Thr Pro Thr Glu Ser Ser Ser His Gly Glu Gly Gln Asn
 820 825 830
 Pro Lys Thr Leu Val Glu Glu Lys Pro Tyr Leu Cys Pro Glu Cys Gly
 835 840 845
 Ala Gly Phe Thr Glu Val Ala Ala Leu Leu Leu His Arg Ser Cys His
 850 855 860
 Pro Gly Val Ser Leu *
 865 869

<210> 1962

<211> 870

<212> PRT

<213> Homo sapiens

<400> 1962

Met Gln Glu Ile Asn Gln Asn Leu Ala Glu Glu Ala Gly Leu Asn Ile
 1 5 10 15
 Thr His Ile Cys Leu Pro Pro Asp Ser Ser Glu Ala Glu Ile Ile Asp
 20 25 30
 Glu Ile Leu Lys Ile Asn Glu Asp Thr Arg Val His Gly Leu Ala Leu
 35 40 45
 Gln Ile Ser Glu Asn Leu Phe Ser Asn Lys Val Leu Asn Ala Leu Lys
 50 55 60
 Pro Glu Lys Asp Val Asp Gly Val Thr Asp Ile Asn Leu Gly Lys Leu
 65 70 75 80
 Val Arg Gly Asp Ala His Glu Cys Phe Val Ser Pro Val Ala Lys Ala
 85 90 95
 Val Ile Glu Leu Leu Glu Lys Ser Val Gly Val Asn Leu Asp Gly Lys
 100 105 110
 Lys Ile Leu Val Val Gly Ala His Gly Ser Leu Glu Ala Ala Leu Gln
 115 120 125
 Cys Leu Phe Gln Arg Lys Gly Ser Met Thr Met Ser Ile Gln Trp Lys
 130 135 140
 Thr Arg Gln Leu Gln Ser Lys Leu His Glu Ala Asp Ile Val Val Leu
 145 150 155 160
 Gly Ser Pro Lys Pro Glu Glu Ile Pro Leu Thr Trp Ile Gln Pro Gly
 165 170 175
 Thr Thr Val Leu Asn Cys Ser His Asp Phe Leu Ser Gly Lys Val Gly
 180 185 190
 Cys Gly Ser Pro Arg Ile His Phe Gly Gly Leu Ile Glu Glu Asp Asp
 195 200 205
 Val Ile Leu Leu Ala Ala Ala Leu Arg Ile Gln Asn Met Val Ser Ser
 210 215 220
 Gly Arg Arg Trp Leu Arg Glu Gln Gln His Arg Arg Trp Arg Leu His
 225 230 235 240

Cys	Leu	Lys	Leu	Gln	Pro	Leu	Ser	Pro	Val	Pro	Ser	Asp	Ile	Glu	Ile
				245					250					255	
Ser	Arg	Gly	Gln	Thr	Pro	Lys	Ala	Val	Asp	Val	Leu	Ala	Lys	Glu	Ile
			260					265					270		
Gly	Leu	Leu	Ala	Asp	Glu	Ile	Glu	Ile	Tyr	Gly	Lys	Ser	Lys	Ala	Lys
		275					280					285			
Val	Arg	Leu	Ser	Val	Leu	Glu	Arg	Leu	Lys	Asp	Gln	Ala	Asp	Gly	Lys
	290					295					300				
Tyr	Val	Leu	Val	Ala	Gly	Ile	Thr	Pro	Thr	Pro	Leu	Gly	Glu	Gly	Lys
305					310					315					320
Ser	Thr	Val	Thr	Ile	Gly	Leu	Val	Gln	Ala	Leu	Thr	Ala	His	Leu	Asn
				325					330					335	
Val	Asn	Ser	Phe	Ala	Cys	Leu	Arg	Gln	Pro	Ser	Gln	Gly	Pro	Thr	Phe
			340					345					350		
Gly	Val	Lys	Gly	Gly	Ala	Ala	Gly	Gly	Gly	Tyr	Ala	Gln	Val	Ile	Pro
		355					360					365			
Met	Glu	Glu	Phe	Asn	Leu	His	Leu	Thr	Gly	Asp	Ile	His	Ala	Ile	Thr
	370					375					380				
Ala	Ala	Asn	Asn	Leu	Leu	Ala	Ala	Ala	Ile	Asp	Thr	Arg	Ile	Leu	His
385					390					395					400
Glu	Asn	Thr	Gln	Thr	Asp	Lys	Ala	Leu	Tyr	Asn	Arg	Leu	Val	Pro	Leu
				405					410					415	
Val	Asn	Gly	Val	Arg	Glu	Phe	Ser	Glu	Ile	Gln	Leu	Ala	Arg	Leu	Lys
			420					425					430		
Lys	Leu	Gly	Ile	Asn	Lys	Thr	Asp	Pro	Ser	Thr	Leu	Thr	Glu	Glu	Glu
	435					440					445				
Val	Ser	Lys	Phe	Ala	Arg	Leu	Asp	Ile	Asp	Pro	Ser	Thr	Ile	Thr	Trp
	450					455					460				
Gln	Arg	Val	Leu	Asp	Thr	Asn	Asp	Arg	Phe	Leu	Arg	Lys	Ile	Thr	Ile
465					470					475					480
Gly	Gln	Gly	Asn	Thr	Glu	Lys	Gly	His	Tyr	Arg	Gln	Ala	Gln	Phe	Asp
				485					490					495	
Ile	Ala	Val	Ala	Ser	Glu	Ile	Met	Ala	Val	Leu	Ala	Leu	Thr	Asp	Ser
			500					505					510		
Leu	Ala	Asp	Met	Lys	Ala	Arg	Leu	Gly	Arg	Met	Val	Val	Ala	Ser	Asp
		515					520					525			
Lys	Ser	Gly	Gln	Pro	Val	Thr	Ala	Asp	Asp	Leu	Gly	Val	Thr	Gly	Ala
	530					535					540				
Leu	Thr	Val	Leu	Met	Lys	Asp	Ala	Ile	Lys	Pro	Asn	Leu	Met	Gln	Thr
545					550					555					560
Leu	Glu	Gly	Thr	Pro	Val	Phe	Val	His	Ala	Gly	Pro	Phe	Ala	Asn	Ile
				565					570					575	
Ala	His	Gly	Asn	Ser	Ser	Val	Leu	Ala	Asp	Lys	Ile	Ala	Leu	Lys	Leu
			580					585					590		
Val	Gly	Glu	Gly	Phe	Val	Val	Thr	Glu	Ala	Gly	Phe	Gly	Ala	Asp	
	595					600					605				
Ile	Gly	Met	Glu	Lys	Phe	Phe	Asn	Ile	Lys	Cys	Arg	Ala	Ser	Gly	Leu
	610					615					620				
Val	Pro	Asn	Val	Val	Val	Leu	Val	Ala	Thr	Val	Arg	Ala	Leu	Lys	Met
625					630					635					640
His	Gly	Gly	Gly	Pro	Ser	Val	Thr	Ala	Gly	Val	Pro	Leu	Lys	Lys	Glu
				645					650					655	
Tyr	Thr	Glu	Glu	Asn	Ile	Gln	Leu	Val	Ala	Asp	Gly	Cys	Cys	Asn	Leu
			660					665					670		
Gln	Lys	Gln	Ile	Gln	Ile	Thr	Gln	Leu	Phe	Gly	Val	Pro	Val	Val	Val
	675						680					685			
Ala	Leu	Asn	Val	Phe	Lys	Thr	Asp	Thr	Arg	Ala	Glu	Ile	Asp	Leu	Val
	690					695					700				
Cys	Glu	Leu	Ala	Lys	Arg	Ala	Gly	Ala	Phe	Asp	Ala	Val	Pro	Cys	Tyr
705					710					715					720
His	Trp	Ser	Val	Gly	Gly	Lys	Gly	Ser	Val	Asp	Leu	Ala	Arg	Ala	Val
				725					730					735	
Arg	Glu	Ala	Ala	Ser	Lys	Arg	Ser	Arg	Phe	Gln	Phe	Leu	Tyr	Asp	Val
			740					745					750		

Gln Val Pro Ile Val Asp Lys Ile Arg Thr Ile Ala Gln Ala Val Tyr
 755 760 765
 Gly Ala Lys Asp Ile Glu Leu Ser Pro Glu Ala Gln Ala Lys Ile Asp
 770 775 780
 Arg Tyr Thr Gln Gln Gly Phe Gly Asn Leu Pro Ile Cys Met Ala Lys
 785 790 795 800
 Thr His Leu Ser Leu Ser His Gln Pro Asp Lys Lys Gly Val Pro Arg
 805 810 815
 Asp Phe Ile Leu Pro Ile Ser Asp Val Arg Ala Ser Ile Gly Ala Gly
 820 825 830
 Phe Ile Tyr Pro Leu Val Gly Thr Met Ser Thr Met Pro Gly Leu Pro
 835 840 845
 Thr Arg Pro Cys Phe Tyr Asp Ile Asp Leu Asp Thr Glu Thr Glu Gln
 850 855 860
 Val Lys Gly Leu Phe *
 865 869

<210> 1963
 <211> 49
 <212> PRT
 <213> Homo sapiens

<400> 1963
 Met Ser Arg Lys Pro Arg Ala Ser Ser Pro Leu Ser Asn Asn His Pro
 1 5 10 15
 Pro Thr Pro Lys Arg Arg Gly Ser Gly Arg Phe Pro Arg Gln Pro Gly
 20 25 30
 Arg Glu Lys Gly Pro Ile Lys Glu Val Pro Gly Thr Lys Gly Ser Pro
 35 40 45 48
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<210> 1964
 <211> 61
 <212> PRT
 <213> Homo sapiens

<400> 1964
 Met Ser Arg Lys Pro Arg Ala Ser Ser Pro Leu Ser Asn Asn His Pro
 1 5 10 15
 Pro Thr Pro Lys Arg Arg Gly Ser Gly Arg His Pro Leu Ile Pro Gly
 20 25 30
 Pro Glu Ala Leu Ser Lys Phe Pro Arg Gln Pro Gly Arg Glu Lys Gly
 35 40 45
 Pro Ile Lys Glu Val Pro Gly Thr Lys Gly Ser Pro *
 50 55 60

<210> 1965
 <211> 503
 <212> PRT
 <213> Homo sapiens

<400> 1965
 Met Cys Arg Ile Leu Asn Asp Glu Ala Ala Trp Asn Glu Leu Ala Arg
 1 5 10 15

3893

<210> 1966
 <211> 324
 <212> PRT
 <213> Homo sapiens

<400> 1966
 Met Pro Gly Thr Tyr Ala Pro Ser Thr Thr Leu Ser Ser Pro Ser Thr
 1 5 10 15
 Gln Gly Leu Gln Glu Gln Ala Arg Ala Leu Met Arg Asp Phe Pro Leu
 20 25 30
 Val Asp Gly His Asn Asp Leu Pro Leu Val Leu Arg Gln Val Tyr Gln
 35 40 45
 Lys Gly Leu Gln Asp Val Asn Leu Arg Asn Phe Ser Tyr Gly Gln Thr
 50 55 60
 Ser Leu Asp Arg Leu Arg Asp Gly Leu Val Gly Ala Gln Phe Trp Ser
 65 70 75 80
 Ala Tyr Val Pro Cys Gln Thr Gln Asp Arg Asp Ala Leu Arg Leu Thr
 85 90 95
 Leu Glu Gln Ile Asp Leu Ile Arg Arg Met Cys Ala Ser Tyr Ser Glu
 100 105 110
 Leu Glu Leu Val Thr Ser Ala Lys Ala Leu Asn Asp Thr Gln Lys Leu
 115 120 125
 Ala Cys Leu Ile Gly Val Glu Gly Gly His Ser Leu Asp Asn Ser Leu
 130 135 140
 Ser Ile Leu Arg Thr Phe Tyr Met Leu Gly Val Arg Tyr Leu Thr Leu
 145 150 155 160
 Thr His Thr Cys Asn Thr Pro Trp Ala Glu Ser Ser Ala Lys Gly Val
 165 170 175
 His Ser Phe Tyr Asn Asn Ile Ser Gly Leu Thr Asp Phe Gly Glu Lys
 180 185 190
 Val Val Ala Glu Met Asn Arg Leu Gly Met Met Val Asp Leu Ser His
 195 200 205
 Val Ser Asp Ala Val Ala Arg Arg Ala Leu Glu Val Ser Gln Ala Pro
 210 215 220
 Val Ile Phe Ser His Ser Ala Ala Arg Gly Val Cys Asn Ser Ala Arg
 225 230 235 240
 Asn Val Pro Asp Asp Ile Leu Gln Leu Leu Lys Lys Asn Gly Gly Val
 245 250 255
 Val Met Val Ser Leu Ser Met Gly Val Ile Gln Cys Asn Pro Ser Ala
 260 265 270
 Asn Val Ser Thr Val Ala Asp His Phe Asp His Ile Lys Ala Val Ile
 275 280 285
 Gly Ser Lys Phe Ile Gly Ile Gly Gly Asp Tyr Asp Gly Ala Gly Lys
 290 295 300
 Tyr Arg Lys Lys Thr Lys Cys Lys Ala Pro Trp Arg Thr Ser Ser Arg
 305 310 315 320
 Met Ser Ser *
 323

<210> 1967
 <211> 520
 <212> PRT
 <213> Homo sapiens

<400> 1967
 Met Ala Glu Asp Glu Pro Ser Gly Ala Leu Leu Lys Pro Leu Val Phe
 1 5 10 15
 Arg Val Asp Glu Thr Thr Pro Ala Val Gln Ser Val Leu Leu Glu
 20 25 30

Arg	Gly	Trp	Asn	Lys	Phe	Asp	Lys	Gln	Glu	Gln	Asn	Ala	Glu	Asp	Trp
	35						40					45			
Asn	Leu	Tyr	Trp	Arg	Thr	Ser	Ser	Phe	Arg	Met	Thr	Glu	His	Asn	Ser
	50					55					60				
Val	Lys	Pro	Trp	Gln	Gln	Leu	Asn	His	His	Pro	Gly	Thr	Thr	Lys	Leu
	65				70					75					80
Thr	Arg	Lys	Asp	Cys	Leu	Ala	Lys	His	Leu	Lys	His	Met	Arg	Arg	Met
				85					90					95	
Tyr	Gly	Thr	Ser	Leu	Tyr	Gln	Phe	Ile	Pro	Leu	Thr	Phe	Val	Met	Pro
			100					105					110		
Asn	Asp	Tyr	Thr	Lys	Phe	Val	Ala	Glu	Tyr	Phe	Gln	Glu	Arg	Gln	Met
		115					120					125			
Leu	Gly	Thr	Lys	His	Ser	Tyr	Trp	Ile	Cys	Lys	Pro	Ala	Glu	Leu	Ser
	130					135					140				
Arg	Gly	Arg	Gly	Ile	Leu	Ile	Phe	Ser	Asp	Phe	Lys	Asp	Phe	Ile	Phe
	145				150					155					160
Asp	Asp	Met	Tyr	Ile	Val	Gln	Lys	Tyr	Ile	Ser	Asn	Pro	Leu	Leu	Ile
				165					170					175	
Gly	Arg	Tyr	Lys	Cys	Asp	Leu	Arg	Ile	Tyr	Val	Cys	Val	Thr	Gly	Phe
			180					185					190		
Lys	Pro	Leu	Thr	Ile	Tyr	Val	Tyr	Gln	Glu	Gly	Leu	Val	Arg	Phe	Ala
		195					200					205			
Thr	Glu	Lys	Phe	Asp	Leu	Ser	Asn	Leu	Gln	Asn	Asn	Tyr	Ala	His	Leu
	210					215					220				
Thr	Asn	Ser	Ser	Ile	Asn	Lys	Ser	Gly	Ala	Ser	Tyr	Glu	Lys	Ile	Lys
	225				230					235					240
Glu	Val	Ile	Gly	His	Gly	Cys	Lys	Trp	Thr	Leu	Ser	Arg	Phe	Phe	Ser
				245					250					255	
Tyr	Leu	Arg	Ser	Trp	Asp	Val	Asp	Asp	Leu	Leu	Leu	Trp	Lys	Lys	Ile
			260				265						270		
His	Arg	Met	Val	Ile	Leu	Thr	Ile	Leu	Ala	Ile	Ala	Pro	Ser	Val	Pro
		275					280					285			
Phe	Ala	Ala	Asn	Cys	Phe	Glu	Leu	Phe	Gly	Phe	Asp	Ile	Leu	Ile	Asp
	290					295					300				
Asp	Asn	Leu	Lys	Pro	Trp	Leu	Leu	Glu	Val	Asn	Tyr	Ser	Pro	Ala	Leu
	305				310					315					320
Thr	Leu	Asp	Cys	Ser	Thr	Asp	Val	Leu	Val	Lys	Arg	Lys	Leu	Val	His
				325					330					335	
Asp	Ile	Ile	Asp	Leu	Ile	Tyr	Leu	Asn	Gly	Leu	Arg	Asn	Glu	Gly	Arg
			340					345					350		
Glu	Ala	Ser	Asn	Ala	Thr	His	Gly	Asn	Ser	Asn	Ile	Asp	Ala	Ala	Lys
		355					360					365			
Ser	Asp	Arg	Gly	Gly	Leu	Asp	Ala	Pro	Asp	Cys	Leu	Pro	Tyr	Asp	Ser
	370					375					380				
Leu	Ser	Phe	Thr	Ser	Arg	Met	Tyr	Asn	Glu	Asp	Asp	Ser	Val	Val	Glu
	385				390					395					400
Lys	Ala	Val	Ser	Val	Arg	Pro	Glu	Ala	Ala	Pro	Ala	Ser	Gln	Leu	Glu
				405					410					415	
Gly	Glu	Met	Ser	Gly	Gln	Asp	Phe	His	Leu	Ser	Thr	Arg	Glu	Met	Pro
			420					425					430		
Gln	Ser	Lys	Pro	Lys	Leu	Arg	Ser	Arg	His	Thr	Pro	His	Lys	Thr	Leu
		435					440					445			
Met	Pro	Tyr	Ala	Ser	Leu	Phe	Gln	Ser	His	Ser	Cys	Lys	Thr	Lys	Thr
						455					460				
Ser	Pro	Cys	Val	Leu	Ser	Asp	Arg	Gly	Lys	Ala	Pro	Asp	Pro	Gln	Ala
	465				470					475					480
Gly	Asn	Phe	Val	Leu	Val	Phe	Pro	Phe	Asn	Glu	Ala	Thr	Leu	Gly	Ala
				485					490					495	
Ser	Arg	Asn	Gly	Leu	Asn	Val	Lys	Arg	Ile	Ile	Gln	Glu	Leu	Gln	Lys
			500					505					510		
Leu	Met	Asn	Lys	Gln	His	Ser	*								
		515				519									

<210> 1968
 <211> 241
 <212> PRT
 <213> Homo sapiens

<400> 1968
 Met Thr Lys Lys Thr Tyr Val Glu Ser Ile Leu Glu Gly Ile Lys Gln
 1 5 10 15
 Ser Lys Gln Glu Asn Leu Asp Ile Asp Val Arg Tyr Leu Ile Ala Val
 20 25 30
 Asp Arg Arg Gly Gly Pro Leu Val Ala Lys Glu Thr Val Lys Leu Ala
 35 40 45
 Glu Glu Phe Phe Leu Ser Thr Glu Gly Thr Val Leu Gly Leu Asp Leu
 50 55 60
 Ser Gly Asp Pro Thr Val Gly Gln Ala Lys Asp Phe Leu Glu Pro Leu
 65 70 75 80
 Leu Glu Ala Lys Lys Ala Gly Leu Lys Leu Ala Leu His Leu Ser Glu
 85 90 95
 Ile Pro Asn Gln Lys Lys Glu Thr Gln Ile Leu Leu Asp Leu Leu Pro
 100 105 110
 Asp Arg Ile Gly His Gly Thr Phe Leu Asn Ser Gly Glu Gly Gly Ser
 115 120 125
 Leu Asp Leu Val Asp Phe Val Arg Gln His Arg Ile Pro Leu Glu Leu
 130 135 140
 Cys Leu Thr Ser Asn Val Lys Ser Gln Thr Val Pro Ser Tyr Asp Gln
 145 150 155 160
 His His Phe Gly Phe Trp Tyr Ser Ile Ala His Pro Ser Val Ile Cys
 165 170 175
 Thr Asp Asp Lys Gly Val Phe Ala Thr His Leu Ser Gln Glu Tyr Gln
 180 185 190
 Leu Ala Ala Glu Thr Phe Asn Leu Thr Gln Ser Gln Val Trp Asp Leu
 195 200 205
 Ser Tyr Glu Ser Ile Asn Tyr Ile Phe Ala Ser Asp Ser Thr Arg Ser
 210 215 220
 Glu Leu Arg Lys Lys Trp Asn His Leu Lys Pro Arg Val Leu His Ile
 225 230 235 240
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<210> 1969
 <211> 324
 <212> DNA
 <213> Homo sapiens

<400> 1969
 ggatatcaga gcacaggatc gaggcctcgg gaaattacct ggcacagcga ctgacatcat 60
 ccttcctgag gggactgagc tcttggaat caaacctct catgttgtgt ggatggacga 120
 ttctcctcac acttacgatg gtacaagggg aaccatgagg cccccaaggg gatccctggg 180
 tgtccacacg aactcctcct accctcattg ggggacggtc gccaaagcctc ctgctgggga 240
 ttaggatcta ttacctgcgc ctggacagga ggggactcct cttttcaccc gctagtctct 300
 gtgcacatac tgccctattg accg 324

<210> 1970
 <211> 685
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> (1)...(685)
 <223> n = a,t,c or g

<400> 1970

acgccaaagct	tggcacgagg	gaagaacttg	gcaaggatct	ctttgattgt	actttgtatg	60
ttctattgaa	atatgatgat	tttaatgctg	acaagcacct	ggctcttgaa	gaattttata	120
gagcattcca	agtgatccag	ttgagtctgc	cagaagatca	gaaactaagc	atcactgcag	180
caactgtggg	acaaagtgc	gttctgagct	gtgccattca	aggaaccctg	agacctccca	240
ttatctggaa	aaggaacaat	attattctaa	ataatttaga	tttgggaagac	atcaatgact	300
ttggagatga	tgggtccttg	tatattacta	aggttaccac	aactcacgtt	ggcaattaca	360
cctgctatgc	agatggctat	gaacaagtct	atcagactca	catcttccaa	gtgaatgttc	420
ctccagtcac	ccgggtgtat	ccagagagtc	aggctaggag	agccgggggt	aactgccagt	480
cttaggggtgc	catgcaggag	gggcatacca	aagccttcag	cttgggctgg	gtttgaagga	540
tgggaattgg	atatttacac	ccaaagcttt	tcccaaacia	cttcacggtt	ttcaaggcaa	600
tggggcagtt	gagggtttca	cattaaggca	ttgttncgct	atggagggtta	cngggggctt	660
acanttggtt	tgcgaaggat	tgagt				685

<210> 1971
 <211> 482
 <212> DNA
 <213> Homo sapiens

<400> 1971

gtttctattc	cgccttcctt	gtagcagata	agggtattgt	cacttcaaaa	cacaacaacg	60
atacccagca	catctgggag	tctgactcca	atgaattttc	tgtaattgct	gacccaagag	120
gaaacactct	aggacgggga	acgacaatta	cgtgagtatg	accaattcct	tataagaatt	180
aatagtcacg	gtgaggatct	tgactctcca	gttctattct	ctgagcaaat	gacttattct	240
gggccttaat	tttctgcct	tataaaatga	ggaaacagaa	ctgttgtcac	ttgaagaaat	300
gtttgaggac	ctgcaaaggg	ccaggcacaa	aggtttgtga	ttgctgttgt	acatggaggg	360
tataaagtag	gaaatagcag	cagcttcccc	aaggggagaag	gcttcttggg	tacccacaga	420
ggaggcactg	ctttgtcagt	ttcccagggt	agaagagtaa	tttgtctgtg	gagcatcctg	480
at						482

<210> 1972
 <211> 493
 <212> DNA
 <213> Homo sapiens

<400> 1972

agaaccaaaa	cagatgtgta	catcctgaat	ttggctgtag	cagatttact	ccttctattc	60
actctgcctt	tttgggctgt	taatgcagtt	catgggtggg	ttttagggaa	aataatgtgc	120
aaaataactt	cagccttgta	cacactaaac	tttgtctctg	gaatgcagtt	tctggcttgt	180
atcagcatag	acagatatgt	ggcagtaact	aaagtcccca	gccaatcagg	agtgggaaaa	240
ccatgctgga	tcattctgtt	ctgtgtctgg	atggctgccca	tcttgctgag	catacccag	300
ctgggttttt	atacagtaaa	tgacaatgct	agggtgcattc	ccattttccc	ccgctaccta	360
ggaacatcaa	tgaaagcatt	gattcaaatg	ctagagatct	gcattggatt	tgtagtaccc	420
tttcttatta	tgggggtgtg	ctactttatc	acagcaagga	cactcatgaa	gatgccaaac	480
attaaaatat	ctc					493

<210> 1973
 <211> 1284
 <212> DNA
 <213> Homo sapiens

<400> 1973

catcgcatgc	ggtccccctgc	ggtaccggac	cggaaatccc	gggtcgagcc	acgcgtccgc	60
ccacgcgtcc	gtaaaaataa	taatgataat	tctcaggatg	gttctgtgaa	taactttcag	120
ggtcacactg	gaaacaagcg	acgctcgcgg	acgccctcga	gggtcacct	tctgcagatc	180
acgaagacac	agaccagggc	cagcagcgtc	cccagcgcga	tcagcagcga	cgtccgccag	240
gccacctgag	taccaggacc	gggagcgact	tccggacctc	ccagccccag	tctggaaccc	300
taagggagcg	gaaagaccac	cagggatccc	tgtctgcctg	gtgctcggga	cacggggagc	360
gccagggact	tccactgtgc	ccagcaggcc	ggcagagacc	gggtttcacc	gtgttgccg	420
ggatggcttc	gatctcctga	ctttgtgatc	cgcccgctc	ggcctcccaa	agtgtcggga	480
ttacaggcgt	gagccaccgc	gcctggccca	cctgcccatt	ttttaaaaac	tttattcttc	540
ctgggtatcaa	ggggagaaaag	aaaaaaattt	tttaaaatat	ttaaaacttt	attttgaaat	600
aattttcaaaa	tcacagcagt	ttgaagggtta	caacaaagaa	cattttgccca	cattttctct	660
ttcattcggt	ccctcctctt	ctccctcacc	cctgtttctt	cctatcctct	ctgaacctatg	720
aaccatttga	ggattatttg	tatacatcat	gctcgtttat	ccgtaagatg	ttttagttaa	780
cattttcccaa	gaacagggac	agcctctcac	atgcccatgg	tacagttctc	aaattcagga	840
aatgtgtaat	attctctgat	cagcccagga	gttgctaatt	tgtagtctct	gtttcaaatt	900
tgccaactgt	cccaataatg	attttgaaag	ccgttgtttt	tctgggccag	gatccaatcc	960
aggatcaagc	gctgccttta	gttgtcctct	ctgcagcctc	ctttcgtttg	gagcaggtec	1020
tcagcctttc	tgtctttcat	gacattgatg	tttgtgaaga	gtacagtcca	gtttctgttg	1080
tagaacgtcc	ttgaagttgg	tcccgggaata	tttgtttaaa	gtgagttggg	aaaccacatt	1140
cacatgtctt	ttggttatgt	gtgtatattgt	caaacagcca	gccttggtgt	gcgtgctgtg	1200
atggggagca	ttactcaaca	gagcctggcc	ctgaccttgg	ggatgtagtt	tgggtttgtg	1260
gggaaagcag	ctaccgccac	gaaa				1284

<210> 1974

<211> 1345

<212> DNA

<213> Homo sapiens

<400> 1974

gcggccgccc	cggcggctcc	tggaaccccc	gttcgcggcg	atgccagcca	ccccagcgaa	60
gccgccgcag	ttcagtgtct	ggataatttg	aaagtacaat	agttggtttc	cctgtccacc	120
cgccccactt	cgcttgccat	cacagcacgc	ctatcggtatg	tgagaggaga	agtcccgtg	180
ctcggggcact	gtctatatac	gcctaacacc	tacatatatt	ttaaaaacat	taaatataat	240
taacaatcaa	aagaaagagg	agaaaggaag	ggaagcatta	ctgggttact	atgcacttgc	300
gactgatttc	ttggcttttt	atcatttttg	actttatgga	atacatcggc	agccaaaacg	360
cctcccgggg	aaggcgccag	cgaagaatgc	atcctaacgt	tagtcaaggc	tgccaaggag	420
gctgtgcaac	atgctcagat	tacaatggat	gtttgtcatg	taagcccaga	ctattttttg	480
ctctggaaag	aattggcatg	aagcagattg	gagtatgtct	catcttcattg	tccaagtgga	540
tattatggaa	ctcgatatcc	agatataaat	aatgtgtaca	aaatgcaaag	ctgactgtga	600
tacctgtttc	aacaaaaatt	tctgcacaaa	atgtaaaagt	ggattttact	tacaccttgg	660
aaagtgcctt	gacaattgcc	cagaagggtt	ggaagccaac	aaccatacta	tggagtgtgt	720
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<210> 1975

<211> 426

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> (1)...(426)

<223> n = a,t,c or g

<400> 1975

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<210> 1976

<211> 1353

<212> DNA

<213> Homo sapiens

<400> 1976

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<210> 1977

<211> 3418

<212> DNA

<213> Homo sapiens

<400> 1977

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<211> 2406

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

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<211> 1781

<212> DNA

<213> Homo sapiens

<400> 1979

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<210> 1980

<211> 2454

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

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<400> 1980

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<211> 2454

<212> DNA

<213> Homo sapiens

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<400> 1981

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<211> 2194

<212> DNA

<213> Homo sapiens

<220>

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<400> 1982

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<211> 3507

<212> DNA

<213> Homo sapiens

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<213> Homo sapiens

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<213> Homo sapiens

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<210> 2009
<211> 1343
<212> DNA
<213> Homo sapiens

<400> 2009

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<210> 2010

<211> 2062

<212> DNA

<213> Homo sapiens

<400> 2010

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<211> 998

<212> DNA

<213> Homo sapiens

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<210> 2012

<211> 1716

<212> DNA

<213> Homo sapiens

<400> 2012

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<210> 2013
<211> 2057
<212> DNA
<213> Homo sapiens

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<211> 3111
<212> DNA
<213> Homo sapiens

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<211> 1653

<212> DNA

<213> Homo sapiens

<400> 2019

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<212> DNA

<213> Homo sapiens

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<212> DNA

<213> Homo sapiens

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<400> 2022

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<400> 2023

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<211> 3327

<212> DNA

<213> Homo sapiens

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<211> 1032

<212> DNA

<213> Homo sapiens

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<212> DNA

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<211> 1966

<212> DNA

<213> Homo sapiens

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<211> 1464

<212> DNA

<213> Homo sapiens

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 <212> DNA
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<400> 2031
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<211> 1554

<212> DNA

<213> Homo sapiens

<400> 2032

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<211> 1534

<212> DNA

<213> Homo sapiens

<400> 2033

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<210> 2034

<211> 3378

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> (1) ... (3378)

<223> n = a,t,c or g

<400> 2034

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<211> 1443

<212> DNA

<213> Homo sapiens

<400> 2035

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<210> 2036

<211> 1458

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

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<223> n = a,t,c or g

<400> 2036

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<210> 2037

<211> 2075

<212> DNA

<213> Homo sapiens

<400> 2037

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<210> 2043
 <211> 981

<212> DNA

<213> Homo sapiens

<400> 2043

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<210> 2044

<211> 1236

<212> DNA

<213> Homo sapiens

<400> 2044

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<210> 2045

<211> 2188

<212> DNA

<213> Homo sapiens

<400> 2045

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<211> 836

<212> DNA

<213> Homo sapiens

<400> 2046

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<210> 2047

<211> 1176
<212> DNA
<213> Homo sapiens

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<210> 2048
<211> 1799
<212> DNA
<213> Homo sapiens

<400> 2048
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<211> 2253
<212> DNA
<213> Homo sapiens

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<210> 2050
<211> 2579
<212> DNA
<213> Homo sapiens

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<400> 2050

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<211> 1324

<212> DNA

<213> Homo sapiens

<400> 2057

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<212> DNA

<213> Homo sapiens

<400> 2058

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<211> 1527

<212> DNA

<213> Homo sapiens

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<211> 2521
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<213> Homo sapiens

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<210> 2061
<211> 968
<212> DNA
<213> Homo sapiens

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<211> 1948

<212> DNA

<213> Homo sapiens

<400> 2062

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<211> 809

<212> DNA

<213> Homo sapiens

<400> 2063

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<210> 2064

<211> 1168

<212> DNA

<213> Homo sapiens

<400> 2064

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<210> 2065

<211> 3163

<212> DNA

<213> Homo sapiens

<400> 2065

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<210> 2073

<211> 1954

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> (1)...(1954)

<223> n = a,t,c or g

<400> 2073

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<210> 2074

<211> 4244

<212> DNA

<213> Homo sapiens

<400> 2074

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<212> DNA

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<211> 1587

<212> DNA

<213> Homo sapiens

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<211> 1631

<212> DNA

<213> Homo sapiens

<220>

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<400> 2079

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